R 992 E Litronic
R 998 SME E Litronic

LIEBHERR

Crawler excavator

Generation
6

Engine
400 kW / 544 HP

Electrical supply
6,000 V–50 Hz

Operating weight
R 992 E Litronic: 90,550–97,100 kg
R 998 SME E Litronic: 100,450–104,200 kg

Bucket capacity
R 992 E Litronic: 2.00–6.80 m³
R 998 SME E Litronic: 4.40–7.20 m³

Experience the progress R 992 E Litronic / R 998 SME E Litronic

Equipment

- Wide choice of types and lengths of backhoe and shovel equipment
- Welded structure with cast steel components for improved stressresistance and longer service life
- Safety check valves to prevent boom and stick cylinder pipes from bursting, with integrated regeneration system for lower consumption
- Shovel equipment with parallel linkage for powerful, even penetration

Buckets

- Different levels of protection to suit different areas of application:
  - Standard for loose, non-abrasive materials
  - HD for hard-to-break, moderately abrasive materials
  - HDV for highly abrasive materials
- Different blade designs:
  - straight (for loading and grading) semi-delta (for hard-to-break, hard-to-extract materials)
  - delta (for compacted or slightly cracked materials)
- Front shovel with semi-automatic flap closure, ideally shaped for optimum material penetration and high filling rate

Electrical system

- 690 V, 50 Hz electric squirrel-cage engine / Protection rating IP55
- 6,000 V high-voltage cabinet and 690 V low-voltage cabinet / Protection rating IP65
- Designed and manufactured by Liebherr

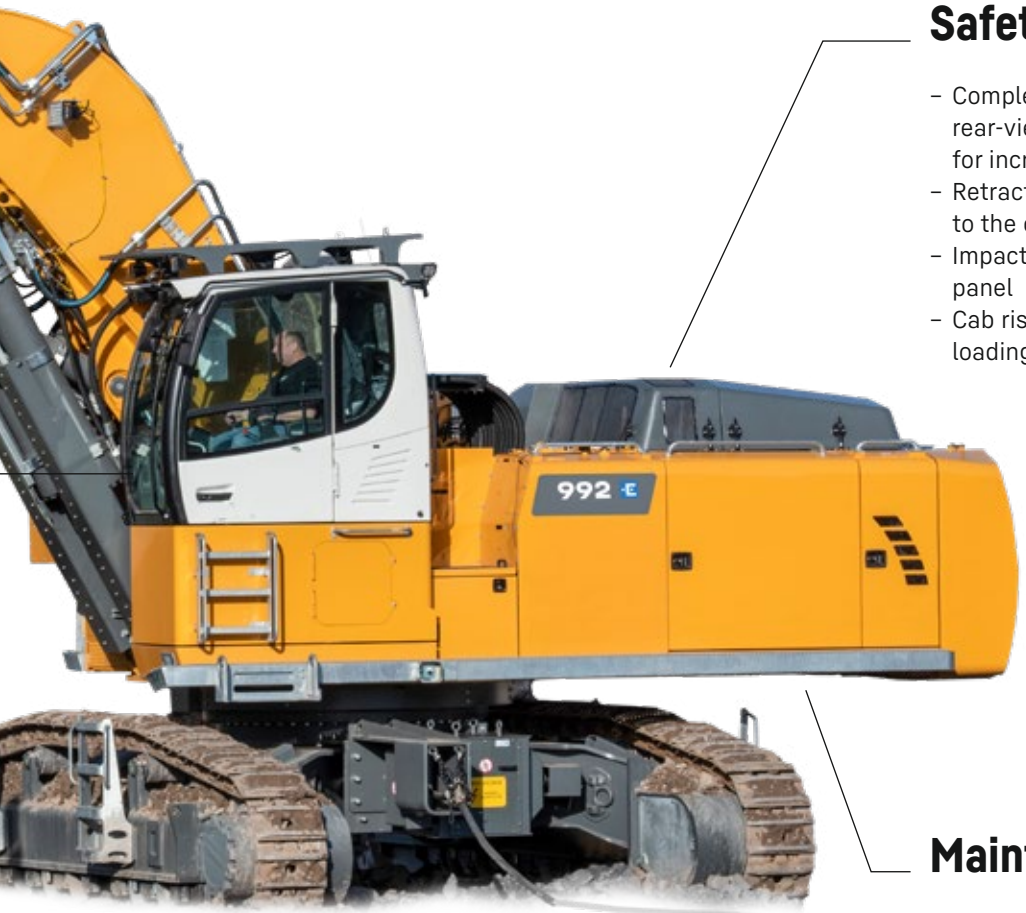
Undercarriage

- Welded undercarriage with rigid X profile for increased robustness
- Chamfered rack pads with double grouser for more manoeuvrability on difficult terrain
- Moulded two-tooth sprocket for longer service life
- Track rollers on double bearings for reliability and increased durability over time
- Stronger travel motor housing protection for improved resistance to wear and tear from hard, abrasive rocks
- Different cable inlets available: left / right / central / retractor (optional)

Experience the progress R 992 E Litronic / R 998 SME E Litronic

Comfort

- Quiet, comfortable cab, the largest and most spacious in its category
- Seat with heater and pneumatic multi-directional shock absorption (air conditioning optional)
- High-resolution 9" colour touchscreens



Safety

- Completely unobstructed all-round view, plus rear-view and side-view monitoring cameras for increased safety
- Retractable console for safe and easy access to the cab
- Impact-resistant windscreen and roof glass panel
- Cab riser for the best possible view of the loading area (optional)

Maintenance

- Access platform for engine and hydraulic distributor compartments to enable safe, ergonomic maintenance work
- Left and right catwalks as standard; wide catwalk with hand rail optional
- Automatic central lubrication system as standard
- Shut-off valve on hydraulic tank outlet as standard
- Optional 230 V power sockets (cab and exterior)

Technical data

Electric motor

Requirements on the supply network	
Power supply	3 phase AC
Rated voltage	6,000 V ± 10%
Frequency	50 Hz ± 1%
Maximum RMS current at rated speed	68 A
Maximum RMS current at start-up	200 A
Electric motor specifications	
Supplier	Nidec Leroy-Somer
Type	Asynchronous, squirrel cage rotor
Design type	B35
Power rating	400 kW at 1,491 RPM
Rated torque	2,568 Nm
Rated voltage	690 V
Power factor	cos Φ = 0.87
Protection class	IP55
Insulation class	H
Cooling mode	IC411
Starting method	Soft starter
Heat protection	Windings and bearings
Anti-condensation	Pre-heating resistance
Motor management	Connection to the integrated excavator system controlling via CAN-BUS to the economical utilisation of the service that is available

Electric system

The high voltage connection box includes:
- Protective fuses
- Earth continuity monitoring diode
- Anti-condensation pre-heating resistor

The high voltage slip ring includes:
- Anti-condensation pre-heating resistor

The high voltage electrical cabinet includes:
- Disconnector and earthing switch
- HV / LV transformer (6,000 V / 690 V) and associated protections
- Power contactor controlled from the cab
- Pre-heating heater and fans for temperature and condensation management

The low voltage electrical cabinet includes:
- Auxiliary power supply 24 V
- Main motor protection device
- Main engine soft starter
- Cab heating and air-conditioning power supply
- Pre-heating and air-conditioning heater for temperature and condensation management

The electrical cabinets are IP65.
Emergency batteries: 2 x 180 Ah / 12 V for machine wake-up, access lighting and emergency equipment position.
Internal temperature management for the main electrical components.

Hydraulic controls

Power distribution	Via control valves in single block with integrated safety valves
Flow summation	To boom and stick
Closed-loop circuit	For uppercarriage swing drive
Servo circuit	Electro-hydraulic control
Equipment and swing	Proportional via joystick levers
Travel	Proportional control via foot pedals or removable levers
Additional functions	Proportional regulation via foot pedals or mini-joystick

Hydraulic system

Hydraulic pumps	
For equipment and travel drive	Two Liebherr variable displacement, swashplate pumps
Max. flow	2 x 515 l/min.
Max. pressure	350 bar
For swing drive	Reversible, variable displacement, swashplate pump, closed-loop circuit
Max. flow	325 l/min.
Max. pressure	350 bar
Pump regulation	Electro-hydraulic with electronic engine speed sensing regulation, minimum flow adjustment, flow compensation, high flow
Hydraulic tank	536 l
Hydraulic system	1,134 l
Filtration	2 full flow filters in return line with integrated fine filter area (5 µm)
Cooling system	A radiator equipped with a hydrostatically driven fan for cooling the oil including that of the pump gearbox circuit
Work and power regulation	Intelligent power management: – According to the combined movements of the machine, thus increasing driving comfort in relation to the work performed – By electronically compensating the control chain to correct inaccuracies in the regulation solenoid valves – By automatically adapting the regulation pressure of the working pumps according to the average electrical power absorbed in order to guarantee a constant average power of the machine
Tool Control	20 pre-adjustable pump flows and pressures for add-on attachments

Swing drive

Drive	Liebherr swashplate motor with integrated brake valve
Transmission	Liebherr compact planetary reduction gears
Swing ring	Liebherr, sealed race ball bearing swing ring, internal teeth
Swing speed	0–5.9 RPM stepless
Swing torque	295 kNm
Holding brake	Wet multi-disc (spring applied, pressure released)

Cab

Cab	LED headlights integrated in the ceiling, a door with a sliding window (can be opened on both sides), large storing box and several stowing possibilities, shock-absorbing suspension, sound damping insulating, tinted laminated safety glass, separate window shades for the sunroof window and windscreen, cigarette lighter and 12 V plug, 230 V plug, storage bins, lunchbox, cup holder
Operator's seat	Liebherr-Comfort seat, airsprung with automatic weight adjustment, vertical and longitudinal seat damping including consoles and joysticks. Seat and armrests adjustable separately and in combination (adjustable in length, height and inclination), seat heating as standard
Arm consoles	Oscillating consoles with seat, tiltable console left
Operation and displays	Large high-resolution operating units, intuitive, colour display with touchscreen, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, energy consumption, machine and attachment parameters
Air-conditioning	Automatic air-conditioning, recirculated air function, fast de-icing and demisting at the press of a button, air vents can be operated via a menu. Recirculated air and fresh air filters can be easily replaced and are accessible from the outside. Heating-cooling unit, designed for extreme outside temperatures, sensors for solar radiation, inside and outside temperatures The air conditioning system contains fluorinated greenhouse gases
Refrigerant	R134a
Global warming potential	1,430
Quantity at 25 °C*	1,410 g
CO_2 equivalent	2.02 t
Electrical cabinet air-conditioning	
Quantity at 25 °C*	500 g
CO_2 equivalent	0.72 t
Vibration emission**	
Hand / arm vibrations	< 2.5 m/s², according with ISO 5349-1:2001
Whole-body vibrations	< 0.5 m/s²
Measuring inaccuracy	According with standard EN 12096:1997
Noise emission	
ISO 6396	72 dB(A) = L_{pA} (inside cab)
2000/14/EC	107 dB(A) = L_{WA} (surround noise)

Undercarriage

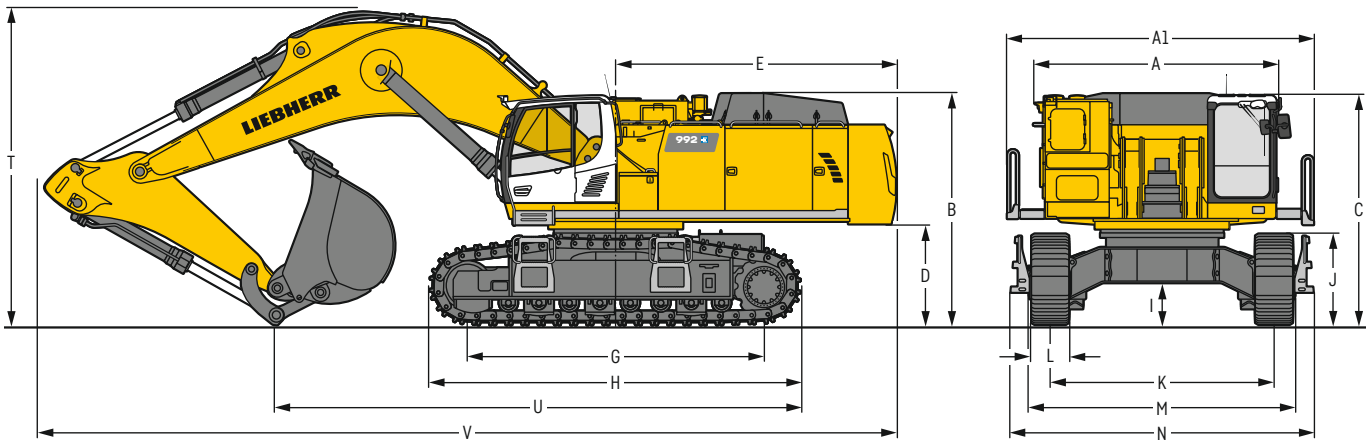
HD (R 992 E)	Gauge 3,600 mm
S-HD (R 998 SME E)	Gauge 3,600 mm
Cable entry	Left, central, right
Drive	Liebherr swashplate motor with brake valves on both sides
Transmission	Liebherr compact planetary reduction gear
Maximum travel speed	2.7 km/h low range (R 992 E) 2.6 km/h low range (R 998 SME E)
Drawbar pull on crawler	568 kN (R 992 E) 645 kN (R 998 SME E)
Track components	D9G, maintenance-free (R 992 E) BMP280, maintenance-free (R 998 SME E)
Track rollers / Carrier rollers	8 / 2
Tracks	Sealed and greased
Track pads	Double grouser
Holding brake	Wet multi-disc (spring applied, pressure released)
Brake valves	Outside the travel motor
Lashing eyes	Integrated

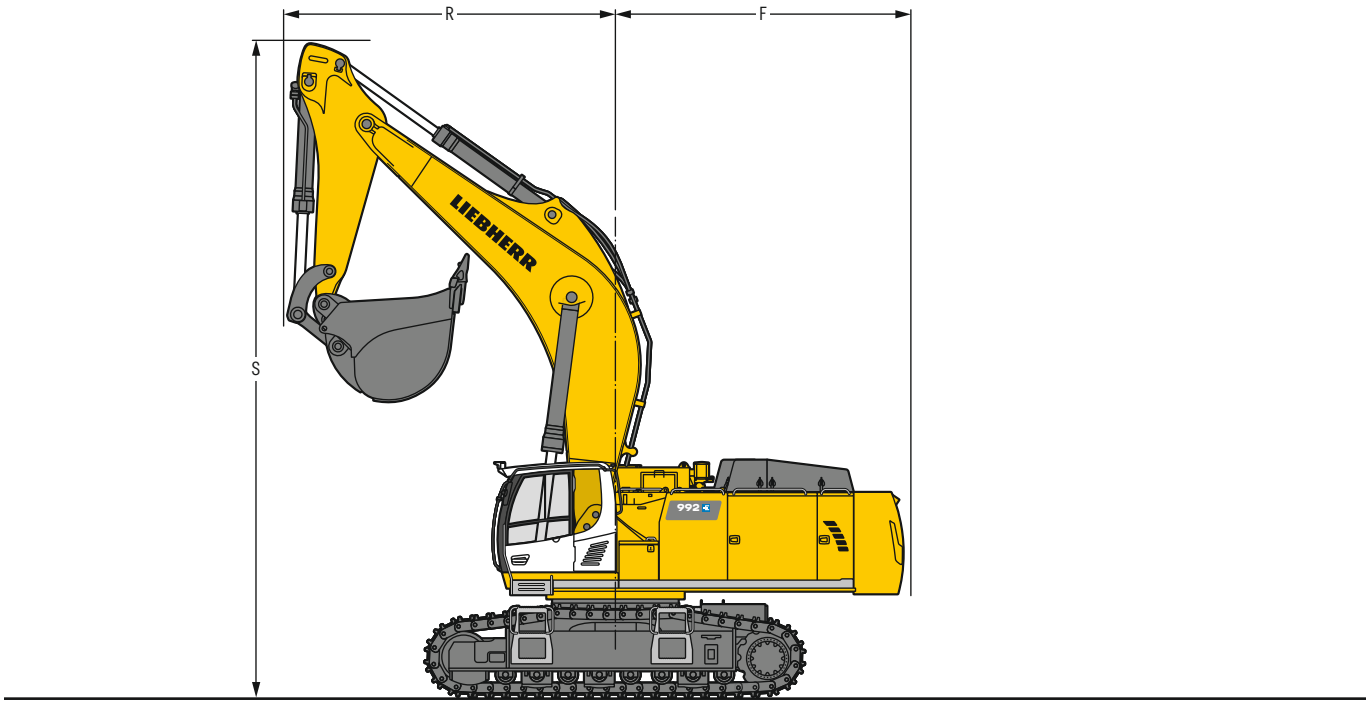
Equipment

Type	Combination of resistant steel plates and cast steel components
Hydraulic cylinders	Liebherr cylinders with seal and guidance systems
Bearings	Sealed, low maintenance
Lubrication	Automatic central lubrication system (except link and tilt geometry)
Hydraulic connections	Pipes and hoses equipped with SAE split-flange connections
Buckets	Standard equipped with Liebherr tooth system

* Valid for standard machine without operator's cab elevation and without height adjustable cab
** For the risk assessment according to 2002/44/EC see ISO/TR 25398:2006

Dimensions R 992 E





		HD		mm
A	Uppercarriage width			3,905
A1	Uppercarriage width with catwalks			4,930
B	Uppercarriage height			3,725
C	Cab height			3,695
D	Counterweight ground clearance			1,620
E	Rear-end length			4,515
F	Tail swing radius			4,640
G	Wheelbase			4,770
H	Undercarriage length			5,960
I	Undercarriage ground clearance			660
J	Track height			1,460
K	Track gauge			3,600
L	Track pad width	500	600	750
M	Width over tracks	4,380	4,380	4,380
N	Width over steps	4,870	4,870	4,870

		Stick length	**Mono boom 7.20 m** direct mounting	**Mono boom 8.60 m** direct mounting	**Mono boom 10.50 m** direct mounting
		m	**mm**	**mm**	**mm**
R	Front swing radius	2.90	5,200	6,350	–
		3.30	5,250	6,400	–
		3.80	5,350	6,500	8,150
		4.70	–	–	8,350
		5.80	–	–	8,600
S	Height with boom up		10,300	11,250	12,400
T	Boom height	2.90	5,100	5,350	–
		3.30	5,250	5,450	–
		3.80	5,550	5,600	5,900
		4.70	–	–	6,100
		5.80	–	–	6,800
U	Length on ground	2.90	8,450	10,200	–
		3.30	8,200	9,950	–
		3.80	8,100	9,850	11,900
		4.70	–	–	11,700
		5.80	–	–	11,550
V	Overall length	2.90	13,800	15,200	–
		3.30	13,500	14,900	–
		3.80	13,400	14,750	16,650
		4.70	–	–	16,450
		5.80	–	–	16,150
	Bucket		5.60 m^3	3.60 m^3	2.60 m^3

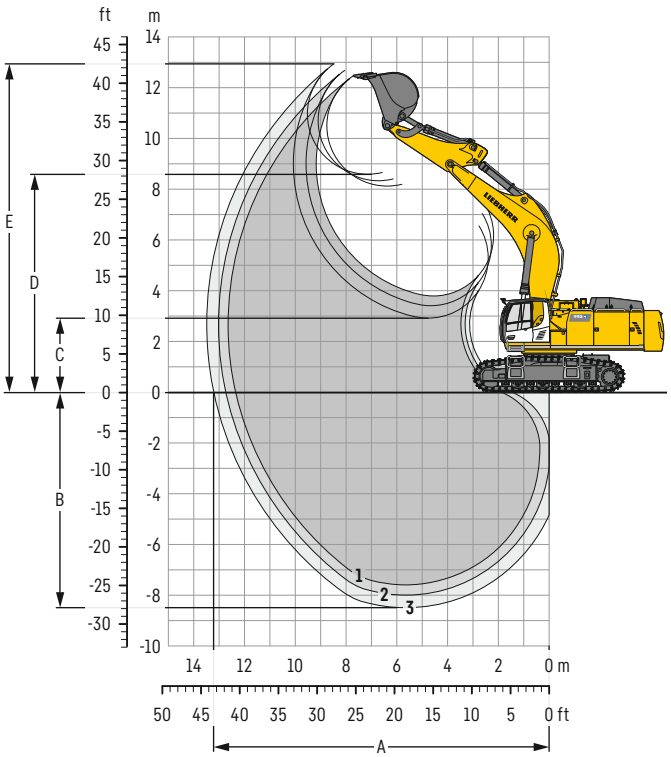
Transport dimensions

removable elements disassembled

	Stick	**Mono boom 7.20 m**			**Mono boom 8.60 m**			**Mono boom 10.50 m**		
	m		**mm**			**mm**			**mm**	
Pad width		500	600	750	500	600	750	500	600	750
Transport width		4,930	4,930	4,930	4,930	4,930	4,930	4,930	4,930	4.930
Transport length	2.90		13,800			15,200			–	
	3.30		13,500			14,900			–	
	3.80		13,400			14,750			16,650	
	4.70		–			–			16,450	
	5.80		–			–			16,150	
Transport height	2.90		5,100			5,350			–	
	3.30		5,250			5,450			–	
	3.80		5,550			5,600			5,900	
	4.70		–			–			6,100	
	5.80		–			–			6,800	
Bucket			5.60 m^3			3.60 m^3			2.60 m^3	

Backhoe bucket R 992 E

with mono boom 7.20 m



Digging envelope

without quick coupler		1	2	3
Stick length	m	2.90	3.30	3.80
A Max. reach at ground level	m	12.35	12.74	13.21
B Max. digging depth	m	7.59	7.99	8.49
C Min. dumping height	m	3.79	3.41	2.92
D Max. dumping height	m	8.12	8.33	8.59
E Max. cutting height	m	12.45	12.68	12.93

Forces

without quick coupler		1	2	3
Stick digging force (ISO 6015)	kN	390	361	329
Bucket digging force (ISO 6015)	kN	485	485	485
Stick digging force (SAE J1179)	kN	374	347	317
Bucket digging force (SAE J1179)	kN	437	437	437

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 14.1 t, mono boom 7.20 m, stick 2.90 m and HD bucket 5.60 m³ (5,550 kg).

Undercarriage		HD		
Pad width	mm	500	600	750
Weight	kg	90,550	91,300	92,400
Ground pressure	kg/cm²	1.75	1.47	1.19

The operating weight includes the basic machine with counterweight 16.0 t, mono boom 7.20 m, stick 2.90 m and HD bucket 5.60 m³ (5,550 kg).

Undercarriage		HD		
Pad width	mm	500	600	750
Weight	kg	92,450	93,200	94,300
Ground pressure	kg/cm²	1.79	1.51	1.23

Buckets Machine stability per ISO 10567* (75 % of tipping capacity)

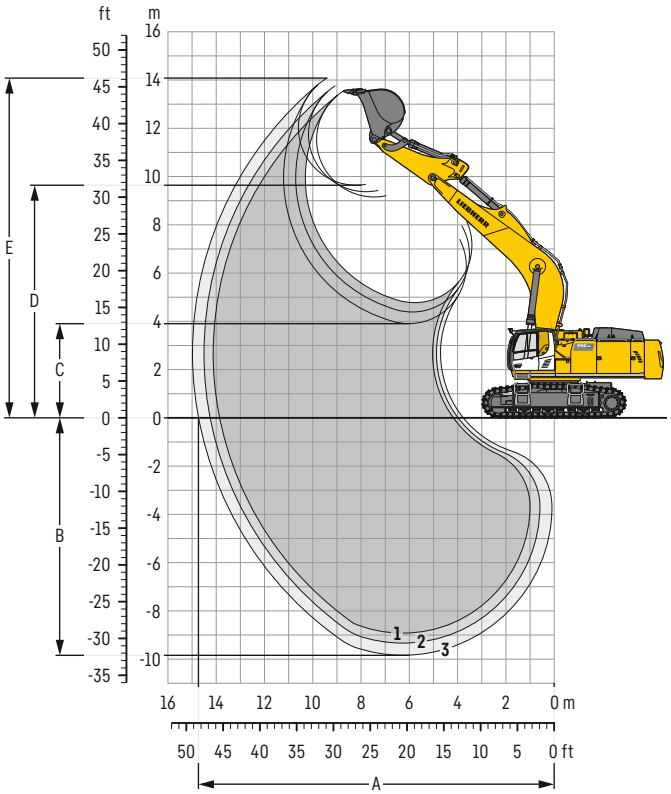
	Cutting width mm	Capacity ISO 7451 m³	Weight kg	HD undercarriage (with track pads 600 mm) Stick length (m) 2.90	3.30	3.80
with counterweight 14.1 t						
STD[1]	2,200	5.20	4,650	▲	▲	▲
	2,300	5.60	4,850	▲	▲	■
	2,300	6.20	5,050	■	■	▲
	2,500	6.80	5,400	▲	▲	△
HD[2]	2,200	4.60	5,100	▲	▲	▲
	2,200	5.20	5,300	▲	▲	■
	2,300	5.60	5,550	▲	■	▲
	2,300	6.20	5,800	■	▲	■
HDV[3]	2,000	4.20	5,600	▲	▲	▲
	2,200	4.70	5,850	▲	▲	▲
	2,200	5.20	6,250	▲	▲	■
	2,300	5.70	6,500	■	■	■
with counterweight 16.0 t						
STD[1]	2,200	5.20	4,650	▲	▲	▲
	2,300	5.60	4,850	▲	▲	▲
	2,300	6.20	5,050	▲	▲	■
	2,500	6.80	5,400	■	■	■
HD[2]	2,200	4.60	5,100	▲	▲	▲
	2,200	5.20	5,300	▲	▲	▲
	2,300	5.60	5,550	▲	▲	■
	2,300	6.20	5,800	▲	■	▲
HDV[3]	2,000	4.20	5,600	▲	▲	▲
	2,200	4.70	5,850	▲	▲	▲
	2,200	5.20	6,250	▲	▲	▲
	2,300	5.70	6,500	▲	■	▲

* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground
[1] Standard bucket with Liebherr teeth Z 90
[2] HD bucket with Liebherr teeth Z 90
[3] HDV bucket with Liebherr teeth Z 90
Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.65 t/m³, ■ = ≤ 1.5 t/m³, △ = ≤ 1.2 t/m³

Backhoe bucket R 992 E

with mono boom 8.60 m



Digging envelope

without quick coupler		1	2	3
Stick length	m	2.90	3.30	3.80
A Max. reach at ground level	m	13.86	14.25	14.74
B Max. digging depth	m	8.92	9.34	9.84
C Min. dumping height	m	4.77	4.39	3.90
D Max. dumping height	m	9.15	9.37	9.65
E Max. cutting height	m	13.54	13.75	14.08

Forces

without quick coupler		1	2	3
Stick digging force (ISO 6015)	kN	390	361	329
Bucket digging force (ISO 6015)	kN	485	485	485
Stick digging force (SAE J1179)	kN	374	347	317
Bucket digging force (SAE J1179)	kN	437	437	437

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 14.1 t, mono boom 8.60 m, stick 3.80 m and HD bucket 3.60 m³ (4,350 kg).

Undercarriage		HD		
Pad width	mm	500	600	750
Weight	kg	90,600	91,350	92,450
Ground pressure	kg/cm²	1.75	1.47	1.19

The operating weight includes the basic machine with counterweight 16.0 t, mono boom 8.60 m, stick 3.80 m and HD bucket 3.60 m³ (4,350 kg).

Undercarriage		HD		
Pad width	mm	500	600	750
Weight	kg	92,500	93,250	94,350
Ground pressure	kg/cm²	1.79	1.51	1.23

Buckets Machine stability per ISO 10567* (75 % of tipping capacity)

	Cutting width mm	Capacity ISO 7451 m³	Weight kg	HD undercarriage (with track pads 600 mm) Stick length (m) 2.90	3.30	3.80
with counterweight 14.1 t						
STD[1]	2,000	4.10	4,100	▲	▲	■
	2,200	4.60	4,450	■	▲	■
	2,200	5.20	4,650	▲	■	△
	2,300	5.60	4,850	■	△	△
	2,300	6.20	5,050	△	△	–
HD[2]	1,800	3.60	4,350	▲	▲	▲
	2,000	4.10	4,700	▲	■	▲
	2,200	4.60	5,100	■	▲	■
	2,200	5.20	5,300	■	△	△
	2,300	5.60	5,550	△	△	–
HDV[3]	1,800	3.70	5,200	▲	▲	■
	2,000	4.20	5,600	■	▲	■
	2,200	4.70	5,850	▲	■	△
	2,200	5.20	6,250	△	△	–
	2,300	5.70	6,500	△	–	–
with counterweight 16.0 t						
STD[1]	2,000	4.10	4,100	▲	▲	▲
	2,200	4.60	4,450	▲	■	▲
	2,200	5.20	4,650	■	▲	■
	2,300	5.60	4,850	▲	■	△
	2,300	6.20	5,050	■	△	△
HD[2]	1,800	3.60	4,350	▲	▲	▲
	2,000	4.10	4,700	▲	▲	■
	2,200	4.60	5,100	▲	■	▲
	2,200	5.20	5,300	▲	■	△
	2,300	5.60	5,550	■	△	△
HDV[3]	1,800	3.70	5,200	▲	▲	▲
	2,000	4.20	5,600	▲	■	▲
	2,200	4.70	5,850	■	▲	■
	2,200	5.20	6,250	■	△	△
	2,300	5.70	6,500	△	△	–

* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

[1] Standard bucket with Liebherr teeth Z 90

[2] HD bucket with Liebherr teeth Z 90

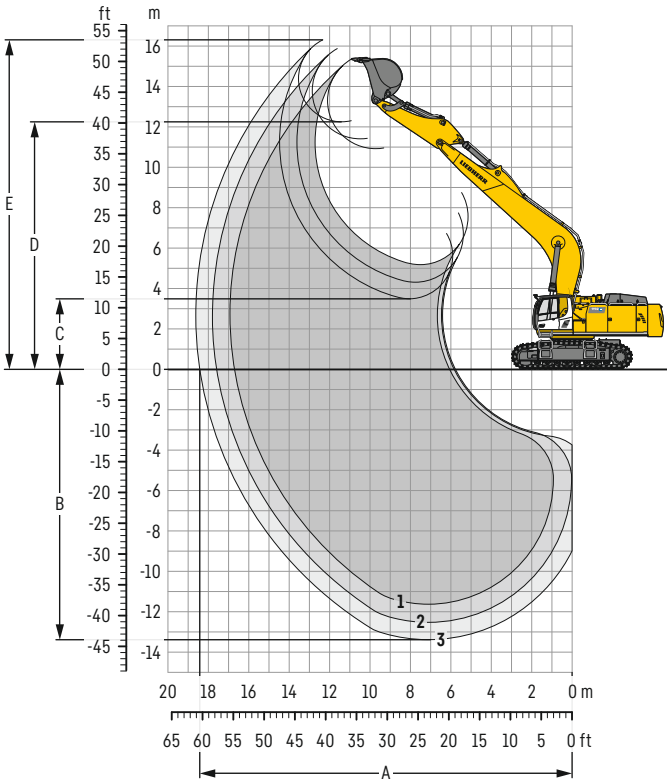
[3] HDV bucket with Liebherr teeth Z 90

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.65 t/m³, ■ = ≤ 1.5 t/m³, △ = ≤ 1.2 t/m³, – = not authorised

Backhoe bucket R 992 E

with mono boom 10.50 m



Digging envelope

without quick coupler		1	2	3
Stick length	m	3.80	4.70	5.80
A Max. reach at ground level	m	16.71	17.59	18.43
B Max. digging depth	m	11.63	12.53	13.38
C Min. dumping height	m	5.18	4.31	3.49
D Max. dumping height	m	10.92	11.41	12.25
E Max. cutting height	m	15.35	15.78	16.30

Forces

without quick coupler		1	2	3
Stick digging force (ISO 6015)	kN	329	284	249
Bucket digging force (ISO 6015)	kN	485	485	356
Stick digging force (SAE J1179)	kN	317	276	237
Bucket digging force (SAE J1179)	kN	437	437	315

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 16.0 t, mono boom 10.50 m, stick 4.70 m and HD bucket 2.60 m³ (3,750 kg).

Undercarriage		HD		
Pad width	mm	500	600	750
Weight	kg	93,350	94,100	95,300
Ground pressure	kg/cm²	1.80	1.51	1.23

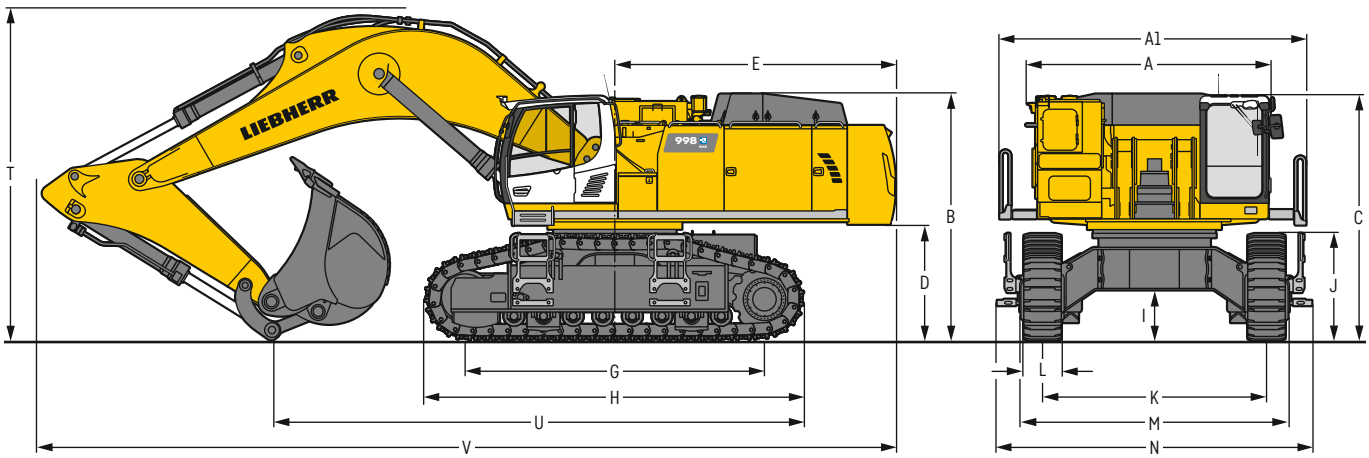
Buckets Machine stability per ISO 10567* (75 % of tipping capacity)

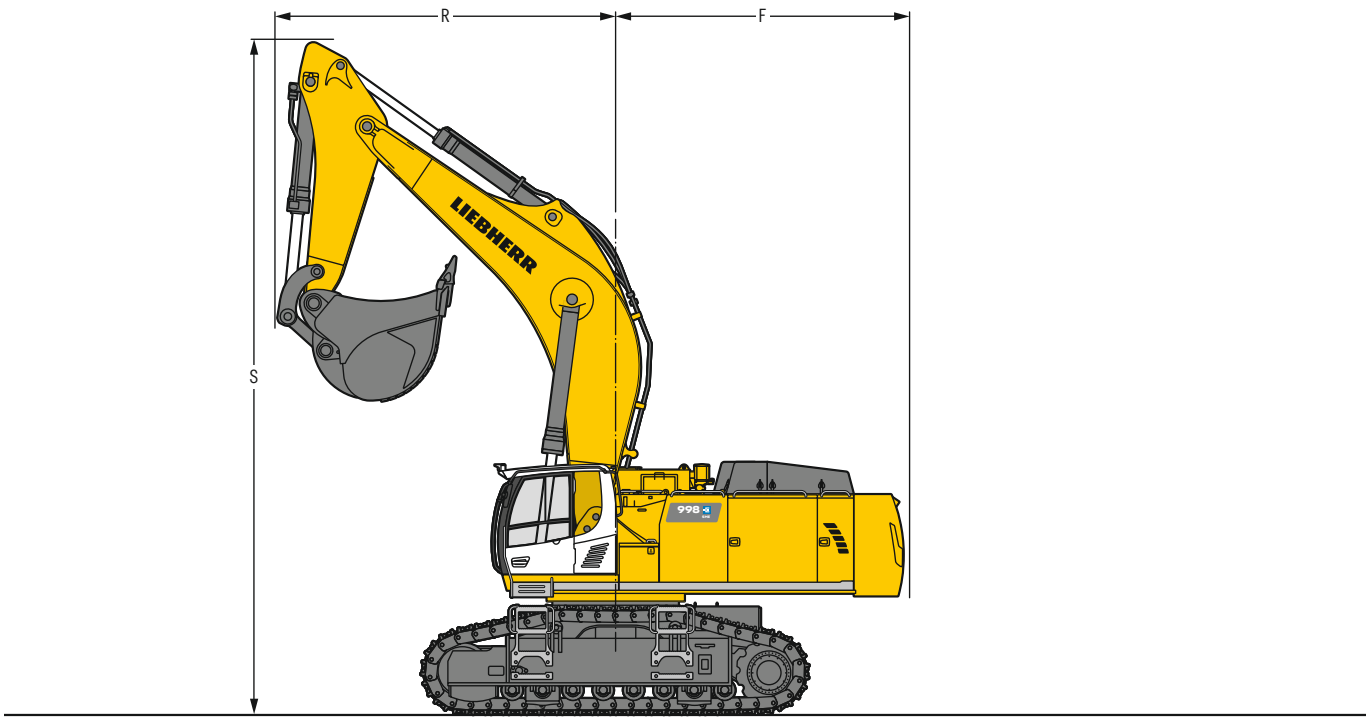
	Cutting width	Capacity ISO 7451	Weight	HD undercarriage (with track pads 600 mm)		
				Stick length (m)		
	mm	m³	kg	3.80	4.70	5.80
with counterweight 16.0 t						
STD[1]	1,450	2.60	3,400	▲	▲	—
	1,800	3.60	3,900	△	—	—
	2,000	4.10	4,100	△	—	—
HD[2]	1,450	2.60	3,750	▲	▲	—
	1,800	3.60	4,350	△	—	—
STD[4]	1,400	2.00	2,500	—	—	▲
	1,700	2.50	2,850	—	—	■
	1,950	3.00	3,100	—	—	△
	2,150	3.50	3,350	—	—	△
HD[5]	1,450	2.00	3,100	—	—	▲
	1,750	2.50	3,600	—	—	■
	2,000	3.00	3,900	—	—	△

* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground
[1] Standard bucket with Liebherr teeth Z 90
[2] HD bucket with Liebherr teeth Z 90
[3] Standard bucket from R 966 Litronic with Liebherr teeth Z 70
[4] HD bucket from R 966 Litronic with Liebherr teeth Z 70
Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.65 t/m³, ■ = ≤ 1.5 t/m³, △ = ≤ 1.2 t/m³, — = not authorised

Dimensions R 998 SME E





		S-HD			mm
A	Uppercarriage width				3,905
A1	Uppercarriage width with catwalks				4,930
B	Uppercarriage height				3,965
C	Cab height				3,935
D	Counterweight ground clearance				1,860
E	Rear-end length				4,515
F	Tail swing radius				4,640
G	Wheelbase				4,810
H	Undercarriage length				6,090
I	Undercarriage ground clearance				795
J	Track height				1,725
K	Track gauge				3,600
L	Track pad width		500	600	750
M	Width over tracks		4,475	4,475	4,475
N	Width over steps		5,065	5,065	5,065

		Stick length **m**	**Mono boom SME 7.20 m** direct mounting **mm**
R	Front swing radius	2.90 SME	5,350
		3.30 SME	5,450
S	Height with boom up		10,600
T	Boom height	2.90 SME	5,250
		3.30 SME	5,400
U	Length on ground	2.90 SME	8,600
		3.30 SME	8,400
V	Overall length	2.90 SME	13,800
		3.30 SME	13,450
	Bucket		6.30 m^3

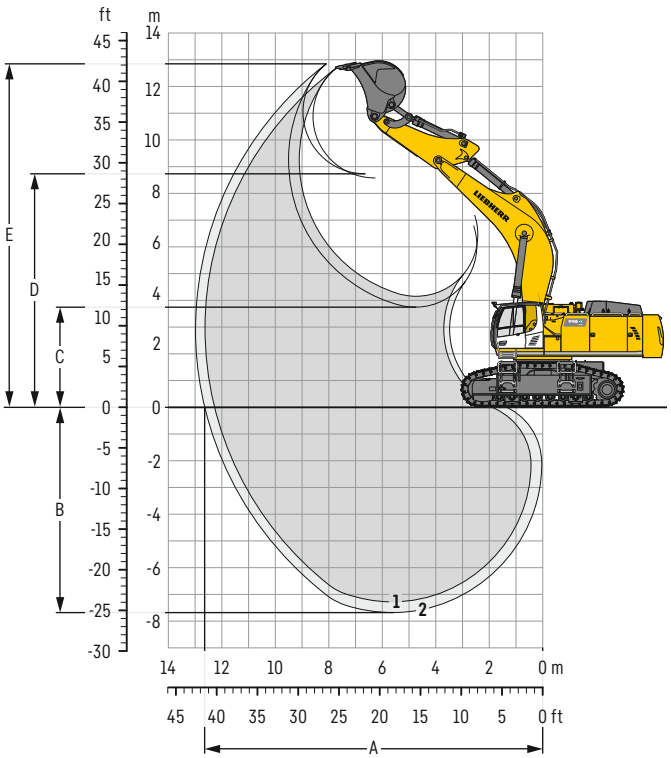
Transport dimensions

removable elements disassembled

	Stick **m**	**Mono boom SME 7.20 m** **mm**
Transport width		5,065
Transport length	2.90 SME	13,800
	3.30 SME	13,450
Transport height	2.90 SME	5,250
	3.30 SME	5,400
Bucket		6.30 m^3

Backhoe bucket R 998 SME E

with mono boom SME 7.20 m



Digging envelope

without quick coupler		1	2
Stick length	m	2.90	3.30
		SME	SME
A Max. reach at ground level	m	12.28	12.64
B Max. digging depth	m	7.28	7.68
C Min. dumping height	m	4.15	3.75
D Max. dumping height	m	8.74	8.58
E Max. cutting height	m	12.68	12.84

Forces

without quick coupler		1	2
Stick digging force (ISO 6015)	kN	426	394
Bucket digging force (ISO 6015)	kN	506	506
Stick digging force (SAE J1179)	kN	406	377
Bucket digging force (SAE J1179)	kN	454	454

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 16.0 t, mono boom SME 7.20 m, stick SME 2.90 m and HDV bucket with semi-delta cutting edge 6.30 m³ (7,600 kg).

Undercarriage		S-HD		
Pad width	mm	500	600	750
Weight	kg	100,450	101,100	102,150
Ground pressure	kg/cm²	1.91	1.60	1.30

Buckets Machine stability per ISO 10567* (75 % of tipping capacity)

	Cutting width	Capacity ISO 7451	Weight	S-HD undercarriage SME equipment (with track pads 600 mm) Stick length (m)	
	mm	m³	kg	2.90	3.30
HD[1]	2,350	6.20	6,500	■	■
	2,500	6.80	6,800	▲	■
HD[2]	2,500	6.80	6,500	■	▲
	2,550	7.20	7,000	▲	■
HDV[3]	2,200	5.20	7,200	▲	▲
	2,350	5.70	7,300	▲	■
	2,350	6.30	7,600	■	▲

* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

[1] HD bucket with semi-delta cutting edge and teeth Z 100 (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

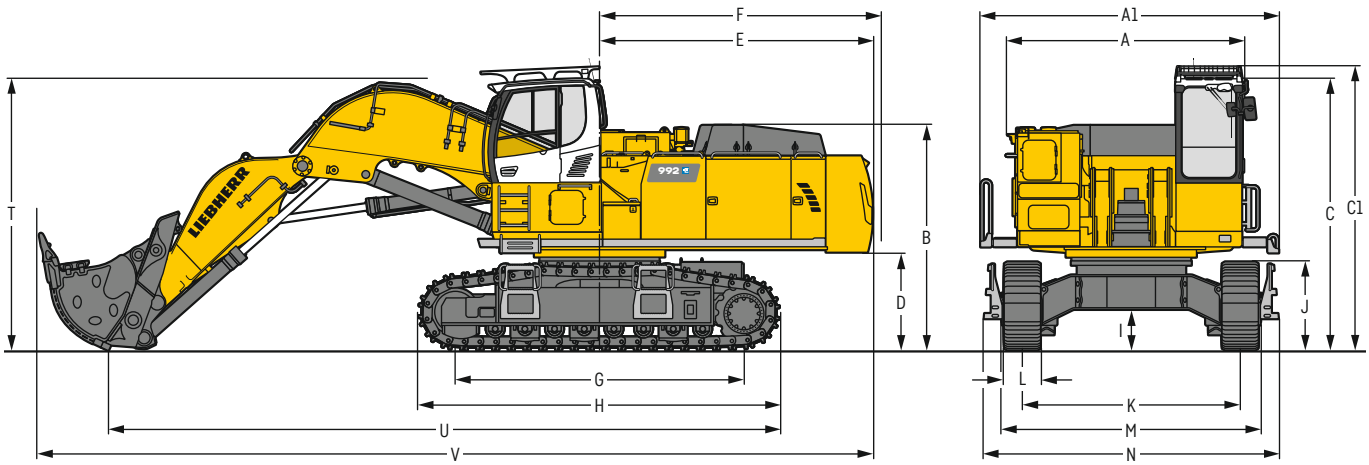
[2] HD bucket with semi-delta cutting edge and teeth Z 90 (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

[3] HDV bucket with semi-delta cutting edge and teeth Z 100 (appropriate for materials above classification 6, according to VOB, Section C, DIN 18300)

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.65 t/m³, ■ = ≤ 1.5 t/m³

Dimensions front shovel R 992 E



		HD	mm
A	Uppercarriage width		3,905
A1	Uppercarriage width with catwalks		4,930
B	Uppercarriage height		3,725
C	Cab height		4,495
C1	Cab height with FOPS top guard		4,680
D	Counterweight ground clearance		1,620
E	Rear-end length		4,515
F	Tail swing radius		4,640
G	Wheelbase		4,770
H	Undercarriage length		5,960

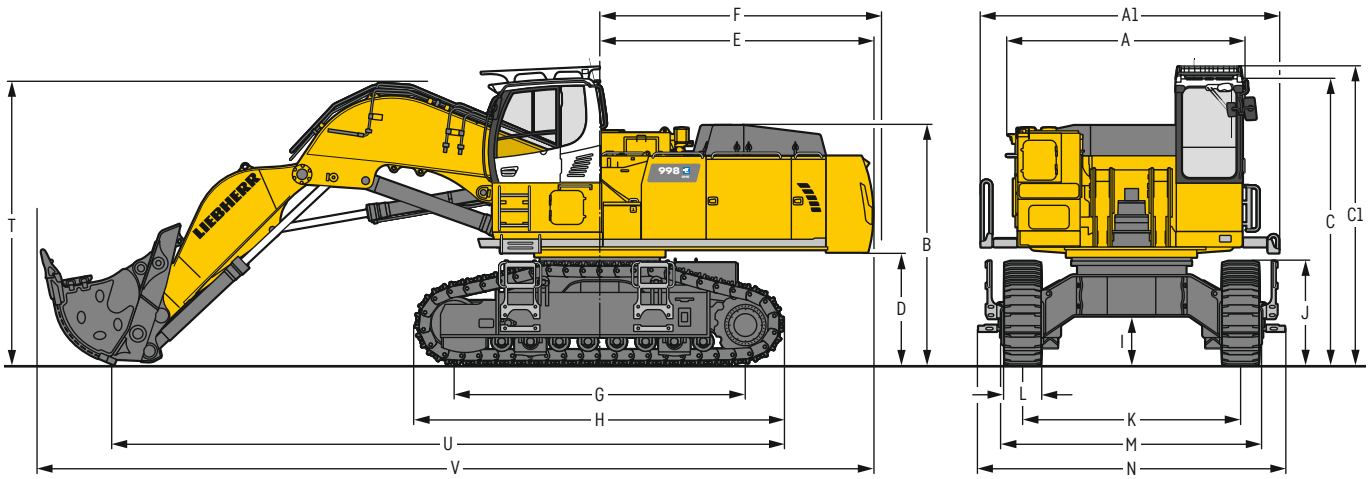
		HD		mm
I	Undercarriage ground clearance			660
J	Track height			1,460
K	Track gauge			3,600
L	Track pad width	500	600	750
M	Width over tracks	4,380	4,380	4,380
N	Width over steps	4,870	4,870	4,870
T	Boom height			4,500
U	Length on ground			11,100
V	Overall length			13,850

Transport dimensions

removable elements disassembled

	Shovel equipment mm
Transport width	4,930
Transport length	13,850
Transport height	4,680
Shovel	5.10 m³

Dimensions front shovel R 998 SME E



		S-HD	mm
A	Uppercarriage width		3,905
A1	Uppercarriage width with catwalks		4,930
B	Uppercarriage height		3,965
C	Cab height		4,735
C1	Cab height with FOPS top guard		4,930
D	Counterweight ground clearance		1,860
E	Rear-end length		4,515
F	Tail swing radius		4,640
G	Wheelbase		4,810
H	Undercarriage length		6,090

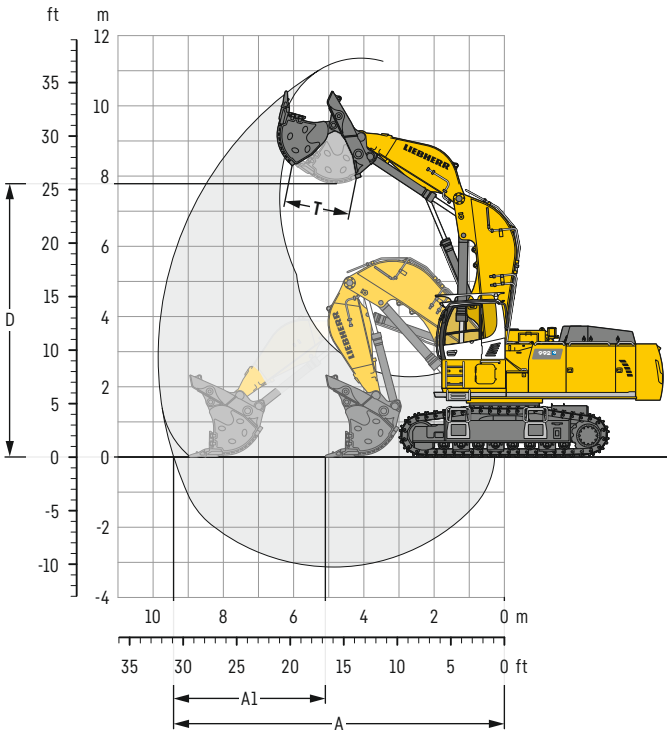
		S-HD		mm
I	Undercarriage ground clearance			795
J	Track height			1,725
K	Track gauge			3,600
L	Track pad width	500	600	750
M	Width over tracks	4,475	4,475	4,475
N	Width over steps	5,065	5,065	5,065
T	Boom height			4,600
U	Length on ground			11,100
V	Overall length			13,800

Transport dimensions

removable elements disassembled

	Shovel equipment mm
Transport width	5,065
Transport length	13,800
Transport height	4,930
Shovel	6.00 m³

Front shovel R 992 E



Digging envelope

A	Max. reach at ground level	m	9.40
A1	Max. crowd length	m	3.90
D	Max. dumping height	m	7.80
T	Bucket opening width	mm	1,825

Forces

Max. crowd force	kN	690
Max. crowd force at ground level	kN	490
Max. breakout force	kN	500

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 14.1t, cab elevation 800mm, operator's cab protective guard, shovel equipment and front shovel 5.10m³ (9,200kg), level II.

Undercarriage		HD		
Pad width	mm	500	600	750
Weight	kg	95,250	96,000	97,100
Ground pressure	kg/cm²	1.84	1.54	1.25

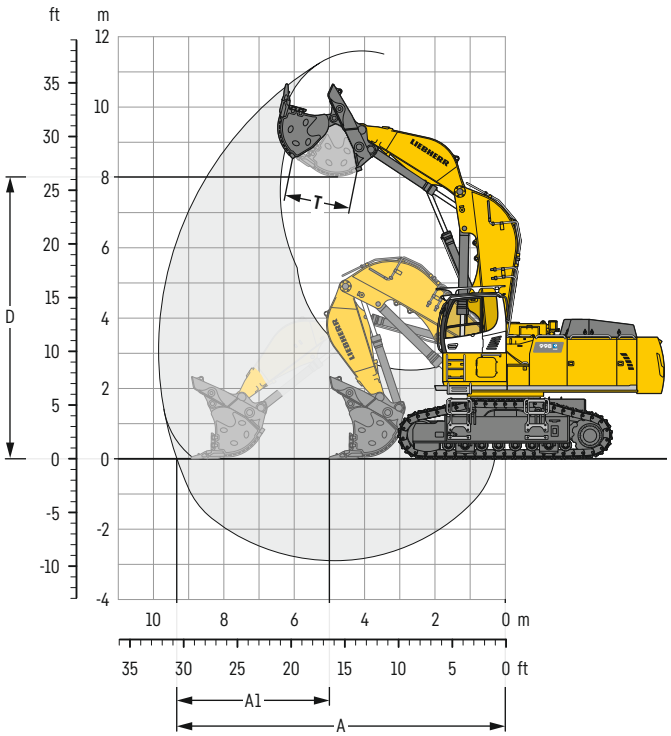
Front shovels

Cutting width	Capacity ISO 7451	Weight	Wear kit level	HD undercarriage
mm	m³	kg		Shovel equipment
2,700	5.10	8,450	I	▲
2,700	5.10	9,200	II	▲
2,700	5.10	10,150	III	■
2,700	5.40	10,600	III	■
2,700	5.60	8,750	I	■
2,700	5.60	9,500	II	■
2,700	6.00	9,950	I	▲
2,700	6.00	10,700	II	■

Level I: For non-abrasive materials, such as limestone without flint inclusion, shot material or easily breakable rock, i.e., deteriorated rock, soft limestone, shale, etc.
Level II: For pre-blasted heavy rock, or deteriorated, cracked material (classification 3 to 4, according to DIN 18300)
Level III: For highly-abrasive materials such as rock with a high silica content, sandstone etc.

Max. material weight ▲ = ≤ 2.0t/m³, ■ = ≤ 1.8t/m³, ▲ = ≤ 1.65t/m³, ■ = ≤ 1.5t/m³

Front shovel R 998 SME E



Digging envelope

A	Max. reach at ground level	m	9.35
A1	Max. crowd length	m	3.90
D	Max. dumping height	m	8.00
T	Bucket opening width	mm	1,825

Forces

Max. crowd force	kN	690
Max. crowd force at ground level	kN	490
Max. breakout force	kN	500

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 16.0 t, cab elevation 800 mm, operator's cab protective guard, shovel equipment SME and front shovel 6.00 m³ (10,000 kg), level II.

Undercarriage		S-HD		
Pad width	mm	500	600	750
Weight	kg	102,500	103,150	104,200
Ground pressure	kg/cm²	1.95	1.63	1.32

Front shovels

Cutting width	Capacity ISO 7451	Weight	Wear kit level	S-HD undercarriage
				Shovel equipment
mm	m³	kg		
2,300	4.40	8,310	II	▲
2,300	4.40	9,160	III	▲
2,700	5.10	8,450	I	▲
2,700	5.10	9,100	II	▲
2,700	5.10	10,150	III	▲
2,700	5.40	10,600	III	▲
2,700	5.60	8,750	I	▲
2,700	5.60	9,500	II	▲
2,700	5.60	11,000	III	▲
2,700	6.00	9,000	I	▲
2,700	6.00	10,000	II	■
2,700	6.00	11,300	III	■
3,150	6.50	10,300	I	■
3,150	6.50	11,000	II	▲
3,150	6.50	12,900	III	■

Level I: For non-abrasive materials, such as limestone without flint inclusion, shot material or easily breakable rock, i.e., deteriorated rock, soft limestone, shale, etc.
Level II: For pre-blasted heavy rock, or deteriorated, cracked material (classification 3 to 4, according to DIN 18300)
Level III: For highly-abrasive materials such as rock with a high silica content, sandstone etc.

Max. material weight ▲ = ≤ 2.0 t/m³, ■ = ≤ 1.8 t/m³, ▲ = ≤ 1.65 t/m³, ■ = ≤ 1.5 t/m³

Lift capacities R 992 E

with mono boom 7.20 m, counterweight 14.1 t and track pads 600 mm

Stick 2.90 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
HD	10.5													23.7*	23.7*	6.4
	9.0							21.6*	21.6*					21.3*	21.3*	8.0
	7.5							21.7*	21.7*	19.5	20.3*			19.4	20.2*	9.0
	6.0					27.2*	27.2*	23.2*	23.2*	19.2	20.9*			16.9	19.9*	9.7
	4.5					31.3*	31.3*	24.6	25.2*	18.6	21.8*			15.4	19.7	10.1
	3.0					32.1	34.9*	23.3	27.1*	17.9	22.8*			14.7	18.8	10.3
	1.5					30.7	36.6*	22.4	28.4*	17.3	22.5			14.5	18.7	10.2
	0					30.0	36.4*	21.8	28.6*	16.9	22.1			14.9	19.3	9.9
	-1.5			38.4*	38.4*	29.9	34.6*	21.6	27.6*	16.9	22.0			16.1	20.8*	9.3
	-3.0	40.5*	40.5*	38.4*	38.4*	30.2	31.0*	21.8	24.6*					18.6	20.4*	8.5
	-4.5			30.0*	30.0*	24.3*	24.3*							18.9*	18.9*	7.1
	-6.0															

Stick 3.30 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
HD	10.5													20.1*	20.1*	7.0
	9.0							20.3*	20.3*					18.2*	18.2*	8.4
	7.5							20.7*	20.7*	19.7*	19.7*			17.3*	17.3*	9.4
	6.0					25.9*	25.9*	22.2*	22.2*	19.4	20.1*			15.9	17.1*	10.1
	4.5					30.1*	30.1*	24.4*	24.4*	18.7	21.2*			14.6	17.3*	10.5
	3.0					32.7	34.0*	23.5	26.5*	18.0	22.3*	14.2	18.2	13.9	17.8	10.6
	1.5					31.0	36.3*	22.5	28.1*	17.3	22.5	13.9	17.9	13.7	17.7	10.6
	0					30.1	36.6*	21.8	28.6*	16.9	22.0			14.1	18.2	10.3
	-1.5			36.7*	36.7*	29.9	35.3*	21.5	27.9*	16.7	21.9			15.1	19.6	9.7
	-3.0	36.5*	36.5*	40.8*	40.8*	30.0	32.2*	21.6	25.5*					17.2	19.8*	8.9
	-4.5			33.1*	33.1*	26.5*	26.5*	19.9*	19.9*					18.8*	18.8*	7.7
	-6.0															

Stick 3.80 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
HD	10.5							18.2*	18.2*					16.7*	16.7*	7.7
	9.0									15.7*	15.7*			15.3*	15.3*	9.0
	7.5							19.4*	19.4*	18.5*	18.5*			14.6*	14.6*	10.0
	6.0							21.0*	21.0*	19.2*	19.2*	15.0	15.6*	14.4*	14.4*	10.6
	4.5					28.4*	28.4*	23.3*	23.3*	18.9	20.3*	14.7	18.5*	13.6	14.6*	11.0
	3.0					32.7*	32.7*	23.8	25.6*	18.1	21.6*	14.3	18.3	13.0	15.1*	11.1
	1.5					31.4	35.5*	22.7	27.5*	17.4	22.6	13.9	17.9	12.8	16.0*	11.0
	0					30.2	36.6*	21.9	28.4*	16.9	22.0	13.6	17.6	13.1	17.0	10.8
	-1.5			34.8*	34.8*	29.8	35.8*	21.4	28.1*	16.6	21.7			13.9	18.1	10.3
	-3.0	32.6*	32.6*	43.3*	43.3*	29.8	33.4*	21.4	26.4*	16.6	20.9*			15.6	19.0*	9.5
	-4.5	47.6*	47.6*	36.5*	36.5*	28.7*	28.7*	21.8	22.3*					18.5*	18.5*	8.3
	-6.0					19.5*	19.5*							16.9*	16.9*	6.5

Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.
According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.
Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

Lift capacities R 992 E

with mono boom 7.20 m, counterweight 16.0 t and track pads 600 mm

Stick 2.90 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
HD	10.5													23.7*	23.7*	6.4
	9.0							21.6*	21.6*					21.3*	21.3*	8.0
	7.5							21.7*	21.7*	20.3*	20.3*			20.2*	20.2*	9.0
	6.0					27.2*	27.2*	23.2*	23.2*	20.4	20.9*			18.0	19.9*	9.7
	4.5					31.3*	31.3*	25.2*	25.2*	19.8	21.8*			16.5	20.2*	10.1
	3.0					34.2	34.9*	24.9	27.1*	19.1	22.8*			15.7	20.0	10.3
	1.5					32.8	36.6*	23.9	28.4*	18.5	23.4*			15.5	19.9	10.2
	0					32.1	36.4*	23.3	28.6*	18.1	23.4*			16.0	20.6	9.9
	-1.5			38.4*	38.4*	32.0	34.6*	23.1	27.6*	18.1	22.1*			17.3	20.8*	9.3
	-3.0	40.5*	40.5*	38.4*	38.4*	31.0*	31.0*	23.3	24.6*					19.9	20.4*	8.5
	-4.5			30.0*	30.0*	24.3*	24.3*							18.9*	18.9*	7.1
	-6.0															

Stick 3.30 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
HD	10.5													20.1*	20.1*	7.0
	9.0							20.3*	20.3*					18.2*	18.2*	8.4
	7.5							20.7*	20.7*	19.7*	19.7*			17.3*	17.3*	9.4
	6.0					25.9*	25.9*	22.2*	22.2*	20.1*	20.1*			16.9	17.1*	10.1
	4.5					30.1*	30.1*	24.4*	24.4*	19.9	21.2*			15.6	17.3*	10.5
	3.0					34.0*	34.0*	25.1	26.5*	19.2	22.3*	15.2	19.4	14.9	17.9*	10.6
	1.5					33.1	36.3*	24.0	28.1*	18.6	23.2*	14.9	19.0	14.7	18.8	10.6
	0					32.2	36.6*	23.3	28.6*	18.1	23.4*			15.1	19.4	10.3
	-1.5			36.7*	36.7*	32.0	35.3*	23.0	27.9*	17.9	22.5*			16.2	20.0*	9.7
	-3.0	36.5*	36.5*	40.8*	40.8*	32.1	32.2*	23.1	25.5*					18.4	19.8*	8.9
	-4.5			33.1*	33.1*	26.5*	26.5*	19.9*	19.9*					18.8*	18.8*	7.7
	-6.0															

Stick 3.80 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
HD	10.5							18.2*	18.2*					16.7*	16.7*	7.7
	9.0									15.7*	15.7*			15.3*	15.3*	9.0
	7.5							19.4*	19.4*	18.5*	18.5*			14.6*	14.6*	10.0
	6.0							21.0*	21.0*	19.2*	19.2*	15.6*	15.6*	14.4*	14.4*	10.6
	4.5					28.4*	28.4*	23.3*	23.3*	20.1	20.3*	15.7	18.5*	14.6	14.6*	11.0
	3.0					32.7*	32.7*	25.4	25.6*	19.3	21.6*	15.3	19.1*	13.9	15.1*	11.1
	1.5					33.5	35.5*	24.2	27.5*	18.6	22.7*	14.9	19.0	13.8	16.0*	11.0
	0					32.4	36.6*	23.4	28.4*	18.1	23.2*	14.6	18.7	14.1	17.5*	10.8
	-1.5			34.8*	34.8*	31.9	35.8*	23.0	28.1*	17.8	22.8*			15.0	19.0*	10.3
	-3.0	32.6*	32.6*	43.3*	43.3*	31.9	33.4*	22.9	26.4*	17.9	20.9*			16.7	19.0*	9.5
	-4.5	47.6*	47.6*	36.5*	36.5*	28.7*	28.7*	22.3*	22.3*					18.5*	18.5*	8.3
	-6.0					19.5*	19.5*							16.9*	16.9*	6.5

Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.
According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.
Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

Lift capacities R 992 E

with mono boom 8.60 m, counterweight 14.1 t and track pads 600 mm

Stick 2.90 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m				m
	12.0																	
	10.5															17.5*	17.5*	8.6
	9.0									16.7*	16.7*					16.7*	16.7*	9.8
	7.5							19.1*	19.1*	17.2*	17.2*	14.7	16.3*			14.2	16.3*	10.7
	6.0							21.2*	21.2*	18.2*	18.2*	14.4	16.6*			12.7	16.2*	11.2
	4.5							22.7	23.5*	17.5	19.5*	13.9	17.2*			11.7	15.2	11.6
HD	3.0							21.2	25.4*	16.6	20.7*	13.3	17.4			11.2	14.6	11.7
	1.5							20.3	26.5*	15.9	21.1	12.9	16.9			11.1	14.5	11.7
	0							19.9	26.7*	15.5	20.6	12.6	16.6			11.3	14.8	11.4
	−1.5							19.8	26.1*	15.4	20.4	12.6	16.6			12.0	15.7	10.9
	−3.0			28.7*	28.7*	28.0	29.8*	19.9	24.6*	15.5	20.3*					13.3	16.9*	10.2
	−4.5			30.9*	30.9*	26.4*	26.4*	20.4	21.8*	16.0	17.3*					15.7	16.5*	9.2
	−6.0					20.7*	20.7*	16.0*	16.0*							15.2*	15.2*	7.7

Stick 3.30 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m				m
	12.0																	
	10.5									16.3*	16.3*					16.4*	16.4*	9.1
	9.0									15.9*	15.9*					15.5	15.8*	10.3
	7.5							18.3*	18.3*	16.5*	16.5*	14.9	15.6*			13.4	15.5*	11.1
	6.0							20.4*	20.4*	17.6*	17.6*	14.5	16.0*			12.0	15.5*	11.6
	4.5							22.8*	22.8*	17.6	19.0*	13.9	16.7*			11.1	14.5	12.0
HD	3.0							21.5	24.9*	16.7	20.3*	13.4	17.4	10.9	14.2	10.7	13.9	12.1
	1.5							20.5	26.3*	16.0	21.1	12.9	16.9	10.6	13.9	10.5	13.8	12.1
	0							19.9	26.7*	15.5	20.6	12.6	16.6			10.7	14.1	11.8
	−1.5					27.6	31.6*	19.7	26.3*	15.3	20.4	12.4	16.4			11.3	14.8	11.4
	−3.0			27.4*	27.4*	27.9	30.8*	19.8	25.1*	15.3	20.4	12.6	16.6			12.4	16.3*	10.7
	−4.5			33.3*	33.3*	27.6*	27.6*	20.2	22.7*	15.7	18.3*					14.4	16.1*	9.7
	−6.0			27.0*	27.0*	22.6*	22.6*	18.1*	18.1*							15.2*	15.2*	8.3

Stick 3.80 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m				m
	12.0															16.3*	16.3*	8.3
	10.5									15.0*	15.0*					15.3*	15.3*	9.8
	9.0									15.0*	15.0*	14.7*	14.7*			14.3	14.8*	10.8
	7.5									15.7*	15.7*	14.7*	14.7*			12.4	14.6*	11.6
	6.0							19.4*	19.4*	16.9*	16.9*	14.6	15.3*	11.5	14.6*	11.2	14.5*	12.1
	4.5							21.8*	21.8*	17.9	18.3*	14.1	16.2*	11.2	14.5	10.4	13.6	12.5
HD	3.0							21.9	24.1*	16.9	19.7*	13.5	17.0*	10.9	14.2	10.0	13.1	12.6
	1.5							20.7	25.7*	16.1	20.8*	12.9	16.9	10.6	13.9	9.9	12.9	12.5
	0							20.0	26.5*	15.5	20.6	12.5	16.5	10.4	13.6	10.0	13.2	12.3
	−1.5					27.4	31.2*	19.6	26.4*	15.2	20.3	12.3	16.3			10.5	13.8	11.9
	−3.0			25.7*	25.7*	27.6	31.7*	19.6	25.5*	15.2	20.2	12.3	16.3			11.4	15.0	11.2
	−4.5	29.5*	29.5*	35.8*	35.8*	28.0	28.9*	19.9	23.5*	15.4	19.2*					13.1	15.5*	10.3
	−6.0			30.0*	30.0*	24.6*	24.6*	19.9*	19.9*							15.0*	15.0*	9.0

Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.
According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.
Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

Lift capacities R 992 E

with mono boom 8.60 m, counterweight 16.0 t and track pads 600 mm

Stick 2.90 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m				m
	12.0																	
	10.5															17.5*	17.5*	8.6
	9.0									16.7*	16.7*					16.7*	16.7*	9.8
	7.5							19.1*	19.1*	17.2*	17.2*	15.7	16.3*			15.2	16.3*	10.7
	6.0							21.2*	21.2*	18.2*	18.2*	15.4	16.6*			13.6	16.2*	11.2
	4.5							23.5*	23.5*	18.7	19.5*	14.9	17.2*			12.6	16.2	11.6
HD	3.0							22.8	25.4*	17.8	20.7*	14.3	17.9*			12.1	15.6	11.7
	1.5							21.9	26.5*	17.1	21.5*	13.9	18.0			12.0	15.5	11.7
	0							21.4	26.7*	16.7	21.9*	13.6	17.8			12.2	15.8	11.4
	−1.5							21.3	26.1*	16.6	21.5*	13.6	17.7			12.9	16.8	10.9
	−3.0			28.7*	28.7*	29.8*	29.8*	21.5	24.6*	16.7	20.3*					14.3	16.9*	10.2
	−4.5			30.9*	30.9*	26.4*	26.4*	21.8*	21.8*	17.3	17.3*					16.5*	16.5*	9.2
	−6.0					20.7*	20.7*	16.0*	16.0*							15.2*	15.2*	7.7

Stick 3.30 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m				m
	12.0																	
	10.5									16.3*	16.3*					16.4*	16.4*	9.1
	9.0									15.9*	15.9*					15.8*	15.8*	10.3
	7.5							18.3*	18.3*	16.5*	16.5*	15.6*	15.6*			14.3	15.5*	11.1
	6.0							20.4*	20.4*	17.6*	17.6*	15.5	16.0*			12.9	15.5*	11.6
	4.5							22.8*	22.8*	18.9	19.0*	14.9	16.7*			12.0	15.4	12.0
HD	3.0							23.1	24.9*	18.0	20.3*	14.4	17.5*	11.7	15.1	11.5	14.9	12.1
	1.5							22.0	26.3*	17.2	21.3*	13.9	18.1	11.5	14.9	11.4	14.7	12.1
	0							21.5	26.7*	16.7	21.8*	13.6	17.7			11.6	15.0	11.8
	−1.5					29.7	31.6*	21.3	26.3*	16.5	21.6*	13.4	17.6			12.2	15.8	11.4
	−3.0			27.4*	27.4*	30.0	30.8*	21.3	25.1*	16.5	20.7*	13.6	16.8*			13.4	16.3*	10.7
	−4.5			33.3*	33.3*	27.6*	27.6*	21.7	22.7*	16.9	18.3*					15.6	16.1*	9.7
	−6.0			27.0*	27.0*	22.6*	22.6*	18.1*	18.1*							15.2*	15.2*	8.3

Stick 3.80 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m				m
	12.0															16.3*	16.3*	8.3
	10.5									15.0*	15.0*					15.3*	15.3*	9.8
	9.0									15.0*	15.0*	14.7*	14.7*			14.8*	14.8*	10.8
	7.5									15.7*	15.7*	14.7*	14.7*			13.3	14.6*	11.6
	6.0							19.4*	19.4*	16.9*	16.9*	15.3*	15.3*	12.3	14.6*	12.0	14.5*	12.1
	4.5							21.8*	21.8*	18.3*	18.3*	15.1	16.2*	12.1	14.8*	11.3	14.5	12.5
HD	3.0							23.4	24.1*	18.1	19.7*	14.5	17.0*	11.7	15.1	10.8	14.0	12.6
	1.5							22.2	25.7*	17.3	20.8*	13.9	17.7*	11.4	14.8	10.7	13.9	12.5
	0							21.5	26.5*	16.7	21.5*	13.5	17.7	11.2	14.6	10.8	14.1	12.3
	−1.5					29.5	31.2*	21.2	26.4*	16.4	21.6*	13.3	17.4			11.3	14.8	11.9
	−3.0			25.7*	25.7*	29.7	31.7*	21.1	25.5*	16.4	20.9*	13.3	17.3*			12.3	15.5*	11.2
	−4.5	29.5*	29.5*	35.8*	35.8*	28.9*	28.9*	21.4	23.5*	16.6	19.2*					14.1	15.5*	10.3
	−6.0			30.0*	30.0*	24.6*	24.6*	19.9*	19.9*							15.0*	15.0*	9.0

Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.
According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.
Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

Lift capacities R 992 E

with mono boom 10.50 m, counterweight 16.0 t and track pads 600 mm

Stick 3.80 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m				m
HD	13.5																							
	12.0											11.2*	11.2*									11.4*	11.4*	11.1
	10.5											11.0*	11.0*	10.9*	10.9*							11.0*	11.0*	12.2
	9.0											11.4*	11.4*	10.9*	10.9*							10.4	10.9*	13.1
	7.5									13.5*	13.5*	12.1*	12.1*	11.2*	11.2*	9.7	10.8*					9.3	10.8*	13.7
	6.0									15.0*	15.0*	13.0*	13.0*	11.7	11.7*	9.4	10.9*					8.5	10.8*	14.2
	4.5									16.5*	16.5*	13.6	13.9*	11.1	12.3*	9.1	11.3*					8.0	10.6	14.5
	3.0											12.8	14.8*	10.6	12.9*	8.8	11.6*					7.7	10.3	14.6
	1.5											12.2	15.5*	10.2	13.4*	8.5	11.4					7.6	10.2	14.5
	0									14.5	19.2*	11.8	15.9	9.8	13.2	8.3	11.2					7.7	10.3	14.3
	−1.5									14.3	19.3*	11.6	15.7	9.7	13.0	8.2	11.1					7.9	10.6	13.9
	−3.0							18.7	22.9*	14.3	19.1*	11.5	15.6	9.6	13.0							8.4	11.3	13.4
	−4.5					26.0*	26.0*	19.0	21.8*	14.4	18.3*	11.7	15.5*	9.8	13.1*							9.3	11.9*	12.6
	−6.0			28.0*	28.0*	23.9*	23.9*	19.5	20.2*	14.8	17.0*	12.0	14.2*									10.8	11.9*	11.6
	−7.5			24.2*	24.2*	20.7*	20.7*	17.6*	17.6*	14.6*	14.6*											11.6*	11.6*	10.2
	−9.0					15.7*	15.7*	12.9*	12.9*													10.4*	10.4*	8.4
	−10.5																							

Stick 4.70 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m				m
HD	13.5																					10.5*	10.5*	10.8
	12.0													9.9*	9.9*							10.0*	10.0*	12.2
	10.5													9.5*	9.5*							9.7*	9.7*	13.2
	9.0													9.7*	9.7*	9.5*	9.5*					9.0	9.6*	14.0
	7.5											10.9*	10.9*	10.1*	10.1*	9.6*	9.6*					8.1	9.6*	14.7
	6.0									13.6*	13.6*	11.8*	11.8*	10.7*	10.7*	9.5	10.0*	7.6	9.7*			7.5	9.7*	15.1
	4.5									15.1*	15.1*	12.8*	12.8*	11.2	11.4*	9.1	10.4*	7.4	9.8*			7.1	9.5	15.3
	3.0									16.0	16.6*	12.9	13.8*	10.6	12.0*	8.7	10.8*	7.2	9.7			6.8	9.2	15.4
	1.5									15.0	17.7*	12.2	14.7*	10.1	12.7*	8.4	11.2	7.0	9.5			6.7	9.1	15.4
	0									14.4	18.5*	11.7	15.3*	9.7	13.0	8.1	10.9	6.9	9.3			6.7	9.1	15.2
	−1.5									14.0	18.9*	11.3	15.4	9.4	12.7	7.9	10.8					6.9	9.4	14.9
	−3.0							18.1	23.0*	13.9	18.8*	11.2	15.2	9.3	12.6	7.9	10.7					7.3	9.9	14.3
	−4.5					23.6*	23.6*	18.3	22.3*	13.9	18.4*	11.2	15.2	9.3	12.6	8.0	10.9					8.0	10.8	13.6
	−6.0	19.5*	19.5*	24.5*	24.5*	25.5*	25.5*	18.7	21.0*	14.2	17.5*	11.4	14.7*	9.6	12.2*							9.0	10.9*	12.7
	−7.5	28.8*	28.8*	28.0*	28.0*	22.8*	22.8*	18.9*	18.9*	14.7	15.8*	11.9	13.0*									10.8	10.8*	11.5
	−9.0			22.8*	22.8*	18.9*	18.9*	15.7*	15.7*	12.6*	12.6*											10.3*	10.3*	9.9
	−10.5																							

Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.
According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.
Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

Stick 5.80 m

Under-carriage	m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m			m
HD	13.5													9.2*	9.2*							9.4*	9.4*	12.3
	12.0															9.1*	9.1*					9.1*	9.1*	13.5
	10.5															8.7*	8.7*					9.0*	9.0*	14.5
	9.0													9.0*	9.0*	8.8*	8.8*	8.5	8.9*			8.2	8.7*	15.2
	7.5													9.5*	9.5*	9.1*	9.1*	8.5	8.9*			7.4	8.6*	15.8
	6.0											11.2*	11.2*	10.2*	10.2*	9.5*	9.5*	8.3	9.1*			6.9	8.5*	16.2
	4.5									14.3*	14.3*	12.3*	12.3*	10.9*	10.9*	9.7	10.0*	8.0	9.4*			6.6	8.6*	16.4
	3.0									15.9*	15.9*	13.4*	13.4*	11.3	11.7*	9.3	10.6*	7.7	9.8*	6.4	8.5	6.3	8.5	16.5
	1.5									16.1	17.3*	13.0	14.4*	10.7	12.4*	8.9	11.1*	7.4	9.9			6.2	8.4	16.5
	0									15.2	18.3*	12.3	15.2*	10.2	13.1*	8.5	11.4	7.2	9.7			6.3	8.5	16.3
	−1.5									14.7	19.0*	11.9	15.8*	9.8	13.2	8.3	11.1	7.0	9.5			6.4	8.7	16.0
	−3.0							18.6	23.8*	14.3	19.3*	11.6	15.7	9.6	12.9	8.1	10.9	7.0	9.4			6.7	9.1	15.5
	−4.5					20.8*	20.8*	18.6	23.5*	14.2	19.2*	11.5	15.5	9.5	12.9	8.1	10.9					7.2	9.7	14.8
	−6.0	16.1*	16.1*	20.3*	20.3*	26.7	28.1*	18.8	22.6*	14.3	18.6*	11.5	15.6	9.6	12.9	8.2	11.1					8.0	10.4*	14.0
	−7.5	22.7*	22.7*	28.3*	28.3*	26.0*	26.0*	19.2	21.1*	14.6	17.5*	11.8	14.7*	9.9	12.2*							9.2	10.4*	12.9
	−9.0	31.2*	31.2*	28.7*	28.7*	22.9*	22.9*	18.7*	18.7*	15.2	15.5*	12.3	12.6*									10.3*	10.3*	11.5
	−10.5			22.4*	22.4*	18.2*	18.2*	14.8*	14.8*	11.5*	11.5*											9.7*	9.7*	9.6

Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.
According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.
Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

Lift capacities R 998 SME E

with mono boom SME 7.20 m, counterweight 16.0 t and track pads 600 mm

Stick SME 2.90 m

Under-carriage		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				
	m															m
S-HD	10.5													23.0*	23.0*	6.8
	9.0							21.2*	21.2*					21.1*	21.1*	8.2
	7.5							21.6*	21.6*	20.3*	20.3*			20.3*	20.3*	9.2
	6.0					27.6*	27.6*	23.1*	23.1*	20.7*	20.7*			17.9	20.0*	9.8
	4.5					31.6*	31.6*	25.1*	25.1*	20.3	21.6*			16.5	19.8*	10.2
	3.0							25.5	27.0*	19.6	22.5*			15.9	19.9*	10.3
	1.5					33.8	36.2*	24.6	28.1*	19.0	23.0*			15.8	19.9*	10.2
	0					33.2	35.7*	24.0	28.1*	18.6	22.8*			16.4	20.0*	9.9
	−1.5			42.3*	42.3*	33.1	33.6*	23.8	26.7*	18.6	21.1*			17.9	19.9*	9.3
	−3.0	43.3*	43.3*	36.6*	36.6*	29.5*	29.5*	23.2*	23.2*					19.3*	19.3*	8.4
	−4.5			27.5*	27.5*	22.0*	22.0*							17.2*	17.2*	7.0

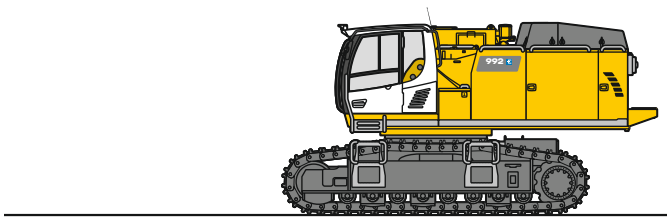
Stick SME 3.30 m

Under-carriage		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				
	m															m
S-HD	10.5													21.1*	21.1*	7.3
	9.0							19.8*	19.8*					19.7*	19.7*	8.7
	7.5							20.5*	20.5*	19.2*	19.2*			19.1*	19.1*	9.6
	6.0					26.1*	26.1*	22.1*	22.1*	19.8*	19.8*			16.9	18.8*	10.2
	4.5					30.3*	30.3*	24.3*	24.3*	20.3	20.9*	15.8	18.8*	15.6	18.8*	10.6
	3.0					33.9*	33.9*	25.6	26.3*	19.6	21.9*	15.4	19.1*	15.0	18.8*	10.7
	1.5					33.9	35.8*	24.6	27.6*	18.9	22.7*	15.1	19.2*	14.9	19.0*	10.6
	0					33.1	35.8*	23.9	27.9*	18.5	22.7*			15.4	19.1*	10.3
	−1.5			42.3*	42.3*	32.9	34.2*	23.6	27.0*	18.3	21.6*			16.6	19.1*	9.7
	−3.0	42.5*	42.5*	38.8*	38.8*	30.7*	30.7*	23.7	24.2*					18.8*	18.8*	8.8
	−4.5			30.6*	30.6*	24.3*	24.3*							17.5*	17.5*	7.5

Height **Can be slewed through 360°** **In longitudinal position of undercarriage** **Max. reach** *** Limited by hydr. capacity**

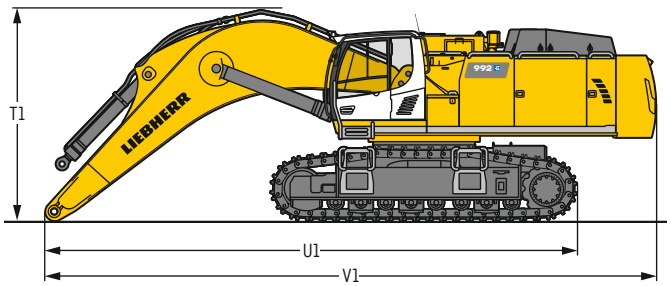
The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600 mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 1,450 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.
According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.
Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

Dimensions and weights R 992 E



Basic machine

Track pads	mm	500	600	750
Weight with backhoe equipment and HD undercarriage without counterweight	kg	54,850	55,600	56,700
Weight with shovel equipment and HD undercarriage without counterweight	kg	54,950	55,700	56,800



Machine without stick

T1	Mono boom 7.20 m	mm	4,150
	Mono boom 8.60 m	mm	4,500
	Mono boom 10.50 m	mm	4,900
U1	Mono boom 7.20 m	mm	10,350
	Mono boom 8.60 m	mm	11,700
	Mono boom 10.50 m	mm	13,650
V1	Mono boom 7.20 m	mm	11,950
	Mono boom 8.60 m	mm	13,450
	Mono boom 10.50 m	mm	15,450

Cab elevation

800 mm

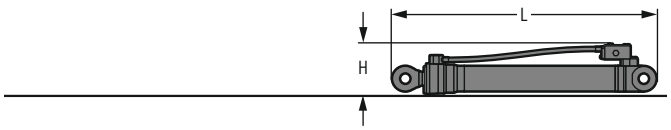
L	Length	mm	1,890
H	Height	mm	925
	Width	mm	1,370
	Weight	kg	600

Counterweight

			Std	heavy
L	Length	mm	775	775
H	Height	mm	1,595	1,595
	Width	mm	3,360	3,360
	Weight	kg	14,100	16,000

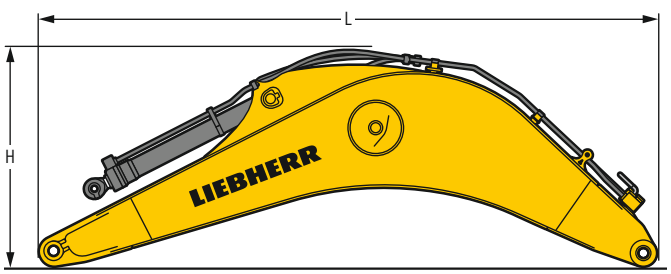
Upper protection screen

L	Length	mm	1,960
H	Height	mm	190
	Width	mm	1,110
	Weight	kg	75



Hoist cylinders (two)

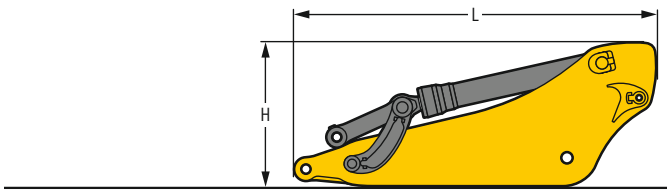
L	Length	mm	2,920
H	Height	mm	550
	Width	mm	400
	Weight	kg	2 x 1,050



Mono boom with stick cylinder

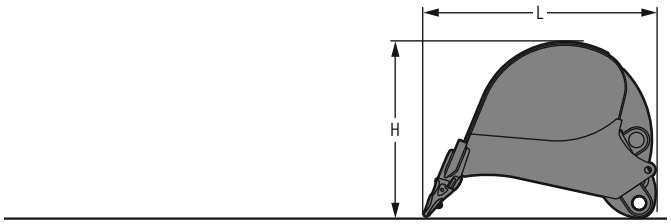
Boom length		m	7.20	8.60	10.50
L	Length	mm	7,550	8,950	10,850
H	Height	mm	2,700	2,800	3,050
	Width	mm	1,460	1,460	1,460
	Weight	kg	9,500	10,400	11,500

Dimensions and weights R 992 E



Stick with bucket cylinder

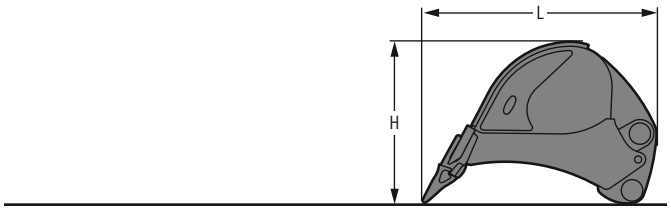
Stick length		m	2.90	3.30	3.80	4.70	5.80
L	Length	mm	4,050	4,450	4,900	5,800	6,900
H	Height	mm	1,700	1,650	1,500	1,450	1,400
	Width	mm	900	900	900	900	900
	Weight	kg	4,450	4,600	4,800	5,150	5,100



Backhoe buckets

Std

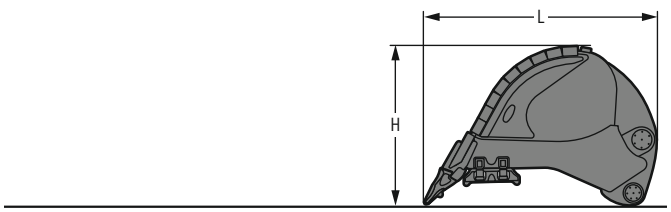
Cutting width		mm	1,450	1,800	2,000	2,200	2,200	2,300	2,300	2,500
	Capacity	m³	2.60	3.60	4.10	4.60	5.20	5.60	6.20	6.80
L	Length	mm	2,650	2,650	2,650	2,650	2,750	2,750	2,850	2,850
H	Height	mm	2,100	2,100	2,100	2,100	2,150	2,150	2,150	2,150
	Width	mm	1,500	1,850	2,050	2,250	2,250	2,350	2,350	2,550
	Weight	kg	3,400	3,900	4,100	4,450	4,650	4,850	5,050	5,400



Backhoe buckets

HD

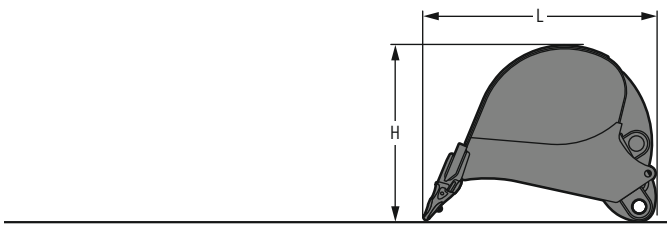
Cutting width		mm	1,450	1,800	2,000	2,200	2,200	2,300	2,300
	Capacity	m³	2.60	3.60	4.10	4.60	5.20	5.60	6.20
L	Length	mm	2,650	2,650	2,650	2,650	2,750	2,750	2,850
H	Height	mm	2,100	2,100	2,100	2,100	2,150	2,150	2,150
	Width	mm	1,500	1,850	2,050	2,250	2,250	2,350	2,350
	Weight	kg	3,750	4,350	4,700	5,100	5,300	5,550	5,800



Backhoe buckets

HDV

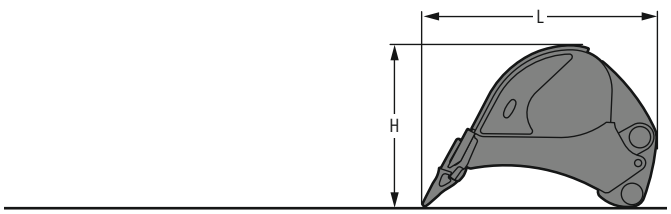
Cutting width		mm	1,800	2,000	2,200	2,200	2,300
	Capacity	m³	3.70	4.20	4.70	5.20	5.70
L	Length	mm	2,650	2,650	2,650	2,750	2,750
H	Height	mm	2,150	2,150	2,150	2,200	2,200
	Width	mm	1,850	2,050	2,250	2,250	2,350
	Weight	kg	5,200	5,600	5,850	6,250	6,500



Backhoe buckets R 966

Std

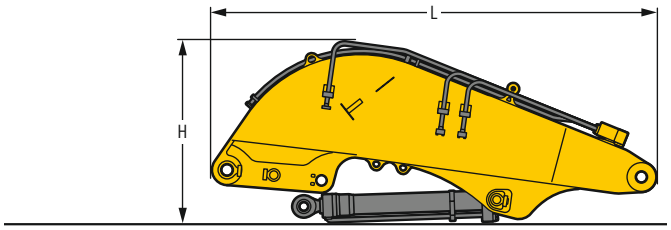
Cutting width		mm	1,400	1,700	1,950	2,150
	Capacity	m³	2.00	2.50	3.00	3.50
L	Length	mm	2,300	2,300	2,300	2,300
H	Height	mm	1,550	1,550	1,550	1,550
	Width	mm	1,450	1,750	2,000	2,200
	Weight	kg	2,500	2,850	3,100	3,350



Backhoe buckets R 966

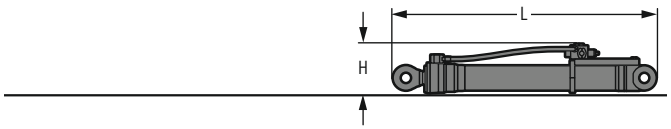
HD

Cutting width		mm	1,450	1,750	2,000
	Capacity	m³	2.00	2.50	3.00
L	Length	mm	2,400	2,400	2,400
H	Height	mm	1,600	1,600	1,600
	Width	mm	1,500	1,800	2,050
	Weight	kg	3,100	3,600	3,900



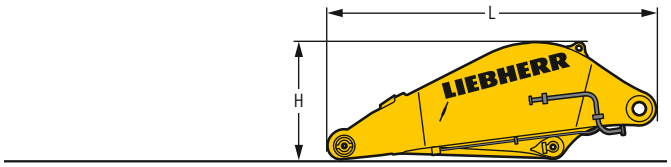
Shovel boom

L	Length	mm	4,950
H	Height	mm	2,050
	Width	mm	1,650
	Weight without crowd cylinder	kg	7,300
	Weight crowd cylinder	kg	2 x 450



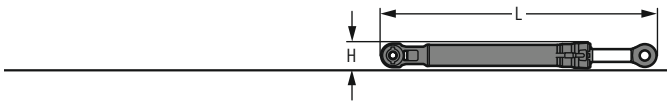
Shovel hoist cylinders (two)

L	Length	mm	2,920
H	Height	mm	550
	Width	mm	450
	Weight	kg	2 x 1,100



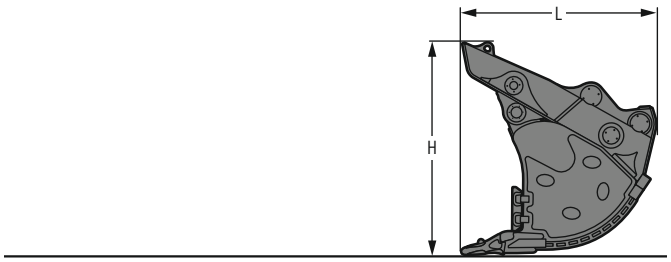
Shovel stick

L	Length	mm	3,660
H	Height	mm	1,300
	Width	mm	1,800
	Weight	kg	4,650



Shovel bucket cylinders (two)

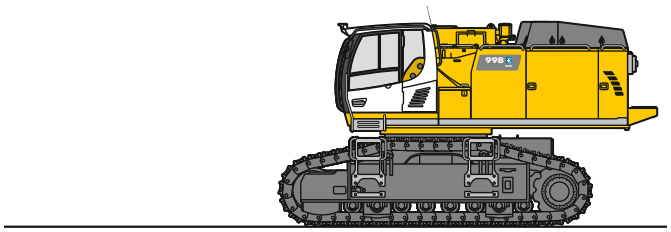
L	Length	mm	3,050
H	Height	mm	450
	Width	mm	450
	Weight	kg	2 x 625



Front shovels

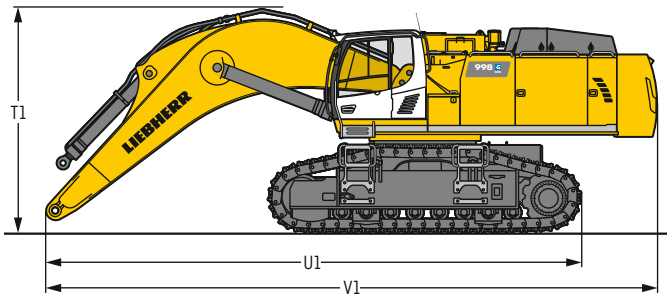
Cutting width		mm	2,700	2,700	2,700	2,700
	Capacity	m³	5.10	5.40	5.60	6.00
L	Length	mm	2,600	2,480	2,800	2,800
H	Height	mm	2,700	2,430	2,700	2,700
	Width	mm	2,700	2,700	2,700	2,700
	Weight					
	Level I	kg	8,450	–	8,750	9,950
	Level II	kg	9,200	–	9,500	10,700
	Level III	kg	10,150	10,600	–	–

Dimensions and weights R 998 SME E



Basic machine

Track pads	mm	500	600	750
Weight with backhoe equipment and S-HD-undercarriage without counterweight	kg	59,400	60,050	61,100
Weight with shovel equipment and S-HD-undercarriage without counterweight	kg	59,500	60,150	61,200



Machine without stick

T1	mm	4,300
U1	mm	10,200
V1	mm	11,850

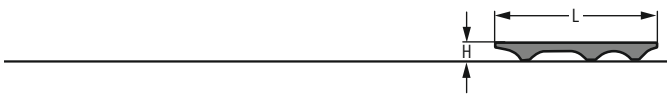
Cab elevation

800 mm

L	Length	mm	1,890
H	Height	mm	925
	Width	mm	1,370
	Weight	kg	600

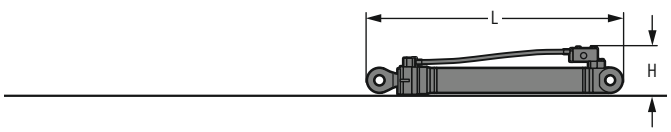
Counterweight

L	Length	mm	775
H	Height	mm	1,595
	Width	mm	3,360
	Weight	kg	16,000



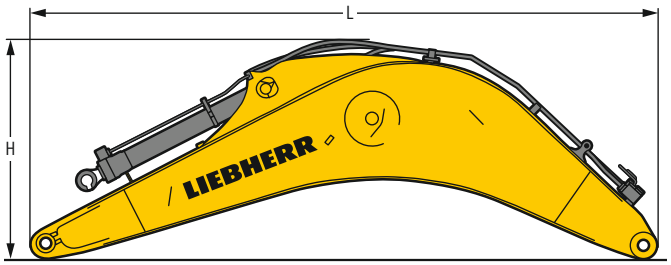
Upper protection screen

L	Length	mm	1,960
H	Height	mm	190
	Width	mm	1,110
	Weight	kg	75



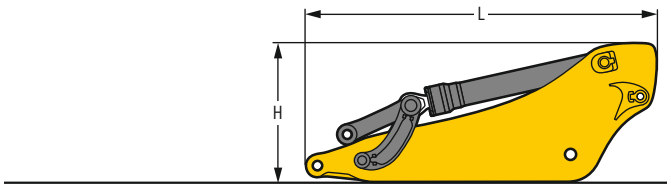
Hoist cylinders (two)

L	Length	mm	2,920
H	Height	mm	550
	Width	mm	400
	Weight	kg	2 x 1,050



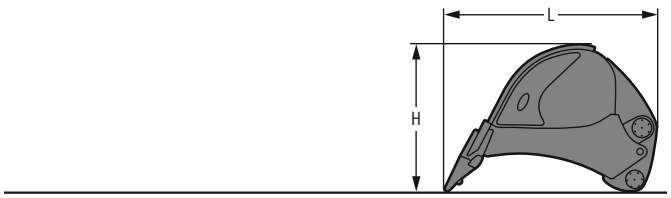
Mono boom with stick cylinder

Boom length		m	7.20
L	Length	mm	7,550
H	Height	mm	2,700
	Width	mm	1,460
	Weight	kg	10,300



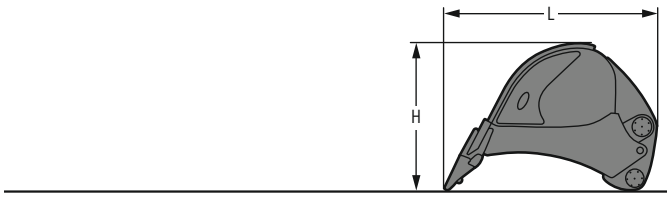
Stick with bucket cylinder

Stick length		m	2.90	3.30
L	Length	mm	4,050	4,450
H	Height	mm	1,700	1,650
	Width	mm	900	900
	Weight	kg	5,050	5,350



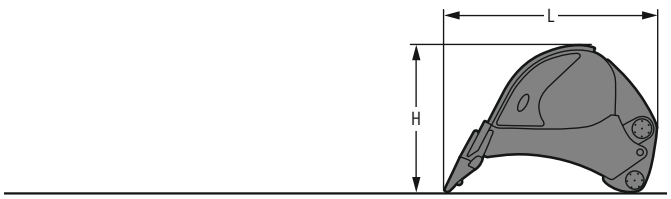
Backhoe buckets (semi-delta cutting edge, teeth Z 100) HD

Cutting width		mm	2,350	2,500
	Capacity	m³	6.20	6.80
L	Length	mm	3,050	3,050
H	Height	mm	2,150	2,150
	Width	mm	2,400	2,550
	Weight	kg	6,500	6,800



Backhoe buckets (semi-delta cutting edge, teeth Z 90) HD

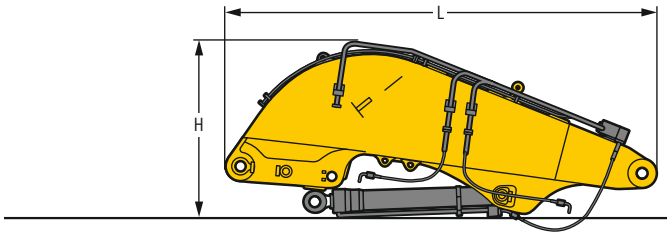
Cutting width		mm	2,500	2,550
	Capacity	m³	6.80	7.20
L	Length	mm	3,100	3,100
H	Height	mm	2,200	2,200
	Width	mm	2,600	2,600
	Weight	kg	6,500	7,000



Backhoe buckets (semi-delta cutting edge, teeth Z 100) HDV

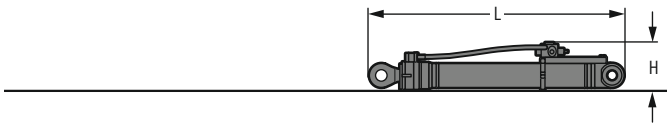
Cutting width		mm	2,200	2,350	2,350
	Capacity	m³	5.20	5.70	6.30
L	Length	mm	2,950	2,950	3,050
H	Height	mm	2,150	2,150	2,200
	Width	mm	2,250	2,400	2,400
	Weight	kg	7,200	7,300	7,600

Dimensions and weights R 998 SME E



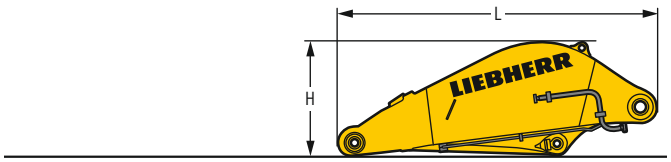
Shovel boom

L	Length	mm	4,950
H	Height	mm	2,050
	Width	mm	1,650
	Weight without crowd cylinder	kg	7,300
	Weight crowd cylinder	kg	2 x 450



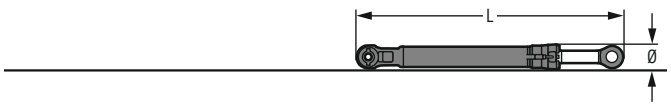
Shovel hoist cylinders (two)

L	Length	mm	2,920
H	Height	mm	550
	Width	mm	450
	Weight	kg	2 x 1,100



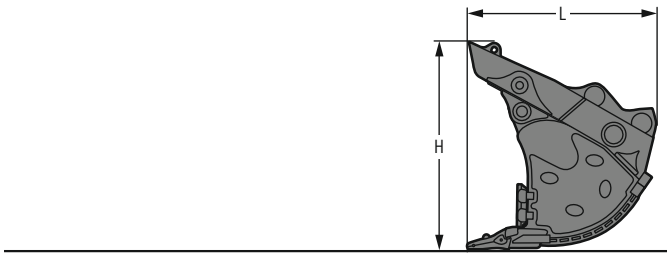
Shovel stick

L	Length	mm	3,660
H	Height	mm	1,300
	Width	mm	1,800
	Weight	kg	4,650



Shovel bucket cylinders (two)

L	Length	mm	3,050
Ø	Height	mm	450
	Width	mm	450
	Weight	kg	2 x 625



Front shovels

Cutting width	mm	2,300	2,700	2,700	2,700	2,700	3,150
	Capacity	m³	4.40	5.10	5.40	5.60	6.00	6.50
L	Length	mm	2,600	2,600	2,480	2,800	2,800	2,800
H	Height	mm	2,700	2,700	2,430	2,700	2,700	2,700
	Width	mm	2,350	2,700	2,700	2,700	2,700	3,150
	Weight							
	Level I	kg	–	8,450	–	8,750	9,000	10,300
	Level II	kg	8,310	9,100	–	9,500	10,000	11,000
	Level III	kg	9,160	10,150	10,600	11,000	11,300	12,900

Serial equipment

Undercarriage

- Lashing eyes
- Sprocket with dirt ejector
- Track and carrier rollers, sealed and lifetime-lubricated
- Travel motor housing protection
- Undercarriage HD (R 992 E)
- Undercarriage S-HD (R 998 SME E)

Uppercarriage

- Access platforms without protruding parts
- Anti-skid surfaces
- Automatic swing brake lock
- Centralised lubrication system (automatic)
- Counterweight heavy 16.0 t[1)]
- Engine hood with gas spring opening
- Extended tool set including tool box
- Handrails
- Lighting for electrical cabinet
- Lockable service doors
- Lockable storage box
- Protection grid on radiator fan
- Sound insulation
- Windshield washer fluid tank

Hydraulic system

- Dedicated swing circuit
- Hydraulic pressure measuring ports
- Hydraulic tank shut-off valve
- Magnetic rod
- Pressure accumulator for controlled lowering of equipment with engine turned off

Cab

- 9" multifunction colour touchscreen
- Air conditioning, automatic, tri-zone, controlled via display
- Armrests adjustable in length, height and inclination
- Bottle holder
- Cab door sliding windows
- Cigarette lighter
- Coat hook
- Electric socket in cabin (12 V)
- Electric socket in cabin (24 V)
- Emergency hammer
- Emergency stop in cab
- Footrest
- Front area camera
- Impact resistant roof window
- Impact resistant two-piece windscreen
- Interior lighting
- Laminated right hand side window
- LiDAT Plus (Liebherr data transfer system)*
- Mobile phone storage net
- Movement priority between swing and boom, adjustable via touchscreen
- Operating modes
- Rearview mirror
- Rear view monitoring camera
- Rear view monitoring camera distance gauge
- Rear window emergency exit
- Right hand side view monitoring camera
- Roll-down sun blinds for windscreen and roof window
- Rubber floor mat, fixed on floor and removable
- Storage box
- Storage nets
- Storage spaces
- Tiltable console left
- Tinted windows
- Visco-elastic damping
- Windscreen wiper and washer

Equipment

- Anti-drift system boom cylinders
- Anti-drift system stick cylinder
- Boom bottom protection[1)]
- Boom cylinders regeneration
- Pipe fracture safety valve for stick cylinder
- Pipe fracture safety valves for boom cylinders
- Pivot points made of cast steel
- SAE split flanges on high pressure lines
- Stick bottom protection
- Stick cylinder regeneration

* optionally extendable after one year
[1)] only for R 998 SME E

Equipment standard / option

Undercarriage

	R 992	R 998
Cable drum with uppercarriage riser	+	+
Cable for cable drum 190 m	+	+
Cable inlet centred	●	●
Cable inlet left	+	+
Cable inlet right	+	+
Cable loose 250 m	+	+
Chain guide 3 pieces	●	●
Chain guide 4 pieces	+	
Special painting	+	+
Steps	●	●
Track pads double grouser 500 mm, chamfered	+	+
Track pads double grouser 600 mm, chamfered	●	●
Track pads double grouser 750 mm, chamfered	+	+
Travel drive gearbox protection	+	+
Undercarriage protection plate for drop-ball application	+	+

Uppercarriage

	R 992	R 998
Catwalks left and right	●	●
Catwalks wide left and right with access ladders and railings	+	+
Cold kit – 40 °C	+	+
Counterweight heavy 16.0 t	+	
Counterweight standard 14.0 t	●	
Electric socket on uppercarriage (230 V)	+	+
Filter for hydraulic hammer return flow	+	+
Fixed cab riser 800 mm	+	+
Fixed cab riser 1,200 mm	+	+
Headlight on uppercarriage, lateral right, LED+, 1 piece	+[1]	+[1]
Headlights on uppercarriage, front, LED, 2 pieces, protections included	●[1]	●[1]
Headlights on uppercarriage, front, LED+, 2 pieces, protections included	+[1]	+[1]
Headlights on uppercarriage, rear, LED+, 2 pieces	+[1]	+[1]
Lighting for uppercarriage access	+[1]	+[1]
Radiator fine mesh protection grid	+	+
Reversible fan drive	+	+
Special painting	+	+
Swing ring and lubrication hoses protection	+	+

Hydraulic system

	R 992	R 998
Bypass filter for hydraulic oil	+	+
High pressure circuit switchable on pedals or mini-joystick	+	+
High pressure circuit with Tool Control (20 attachment adjustments on display)	+	+
Liebherr hydraulic oil	●	●
Liebherr hydraulic oil, adapted for extreme climate conditions	+	+
Liebherr hydraulic oil, biodegradable	+	+

Electric motor

	R 992	R 998
Lighting for engine compartment	+[1]	+[1]

Cab

	R 992	R 998
2" seat belt with retractor	●	●
4-points seat belt	+	+
Acoustic travel alarm deactivatable	+	+
Auxilary heater programmable	+	+
Bottom windscreen wiper	+	+
Cool box (12 V)	+	+
Dark tinted windows	+	+
Electrically adjustable and heated outside rear-view mirrors	+	+
Electric socket in cabin (230 V)	+	+
FGPS front guard tiltable	+	+
Fire extinguisher	+	+
First-aid box	+	+
Follow me home	+[1]	+[1]
FOPS top guard	+	+
Handrests elevated for joysticks	+	+
Headlights on cab, front, LED, 2 pieces	●[1]	●[1]
Headlights on cab, front, LED+, 2 pieces	+[1]	+[1]
Headlights on cab, rear, LED, 2 pieces	+[1]	+[1]
Headlights on cab roof, front, LED+, 2 pieces	+[1]	+[1]
Lighting for cabin access	+[1]	+[1]
Luminosity control (LED+ headlights)	+[1]	+[1]
Medium pressure circuit	+	+
Mini-joysticks proportional	+	+
Operator seat Comfort	●	●
Operator seat Premium	+	+
Overload warning system	+	+
Radio Comfort	+	+
Radio pre-installation	●	●
Roof sun shield	+	+
Roof window wiper	+	+
Rotating beacon on cabin, LED, 1 piece	+	+
Seat belt reminder	+	+
Shortkey buttons on joystick configurable	●	●
Special painting	+	+
Sun visor	+	+

Equipment

	R 992	R 998
Boom bottom protection	+	
Boom cylinders rod protection	+	+
Bucket cylinder rod protection	+	+
Centralised lubrication extended for connecting link	+	+
Floating boom	+	+
Headlights on boom, LED, 2 pieces, protections included	●[1]	●[1]
Headlights on boom, LED+, 2 pieces, protections included	+[1]	+[1]
Mono boom 7.20 m	+	
Mono boom 8.60 m	+	
Mono boom 10.50 m	+	
Mono boom SME 7.20 m		+
Preparation for ripper tooth	+	+
Quick coupler SWA 92 hydraulic	+	
Quick coupler SWA 105 hydraulic		+
Shovel boom 4.60 m	+	+
Shovel stick 3.30 m	+	+
Shovel stick cylinder rod protection	+	+
Special painting	+	+
Stick 2.90 m	+	
Stick 3.30 m	+	
Stick 3.80 m	+	
Stick 4.70 m	+	
Stick 5.80 m	+	
Stick SME 2.90 m		+
Stick SME 3.30 m		+

● = Standard, + = Option

[1] Equipment not individually available, but only as predefined packages

Non-exhaustive list, please contact us for further information.

Options and / or special equipment, supplied by vendors other than Liebherr, are only to be installed with the knowledge and approval of Liebherr in order to retain warranty.

The Liebherr Group

Global and independent: more than 75 years of success
Liebherr was founded in 1949 when, with the development of the world's first mobile tower crane, Hans Liebherr laid the foundations for a family-run company which now has more than 50,000 employees and comprises over 150 companies across every continent. The holding company of the Group is Liebherr-International AG in Bulle, Switzerland, whose shareholders are exclusively members of the Liebherr family.

Technology leadership and pioneering spirit
Liebherr is a pioneer and its forward-looking approach has seen it make important contributions to technology history over a wide variety of industries. Employees throughout the world continue to share the courage of the company founder, sharing a passion to produce innovative products and a determination to provide world-leading equipment and machinery.

Diversified product programme
Liebherr is one of the world's biggest construction machine manufacturers and provides high-quality, user-oriented products and services. Its product range includes the product segments earthmoving, material handling, deep foundation, mining, mobile and crawler cranes, tower cranes, concrete technology, maritime cranes, aerospace and transportation systems, gear technology and automation systems, refrigerators and freezers, components and hotels.

Customised solutions and maximum customer value
Liebherr solutions are characterised by precision, implementation and longevity. The company is committed to technological excellence and to providing customers with solutions that match their needs exactly. For Liebherr, customer focus does not end with delivery of a product but continues through a comprehensive range of back-up and support services.

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